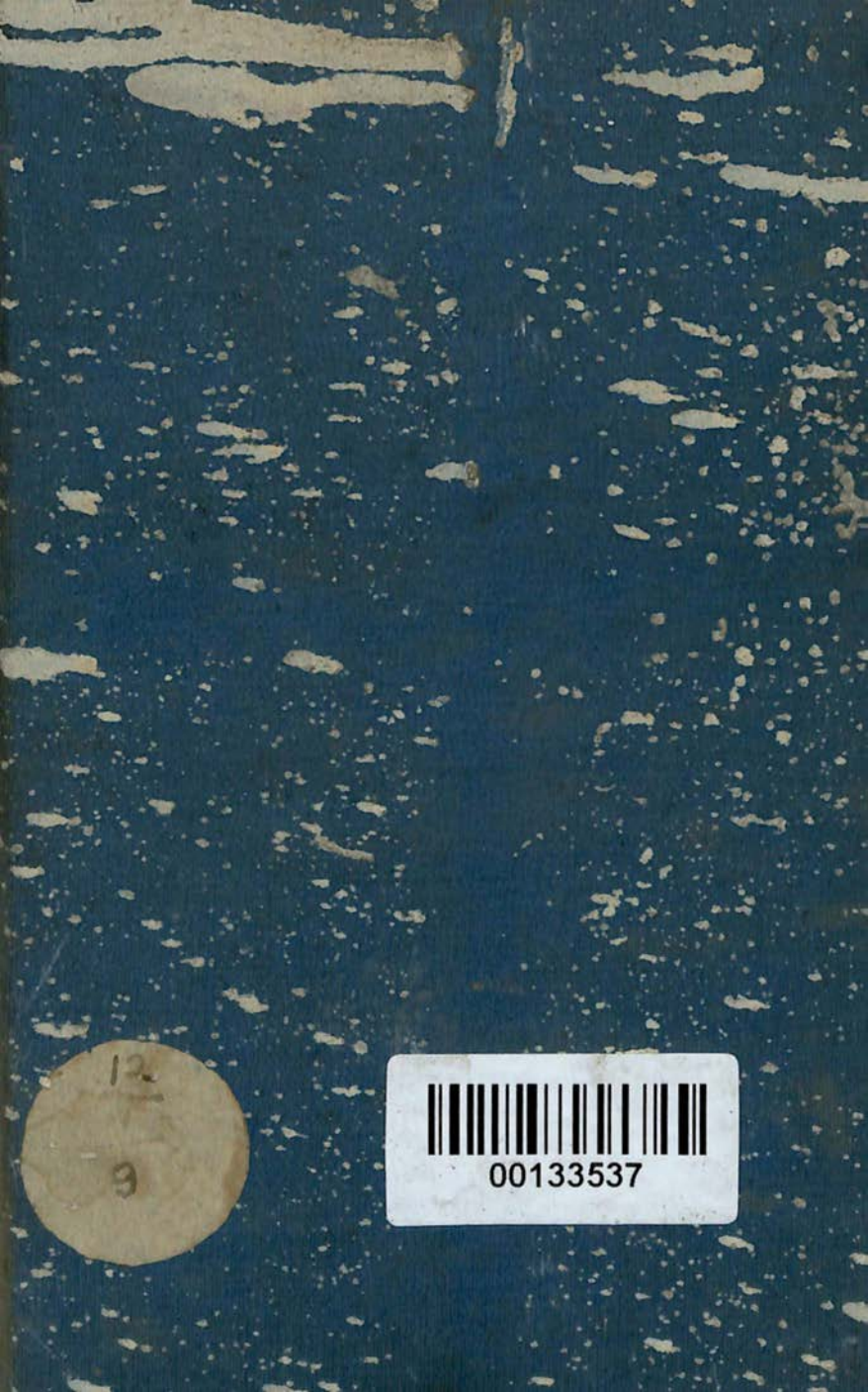
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THE
ASIATIC SOCIETY OF BOMBAY
Town Hall, Bombay.

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REPORT

OF THE

BOMBAY CHAMBER OF COMMERCE

FOR THE

Year 1866-67.

PRESENTED TO THE ANNUAL GENERAL MEETING, HELD ON THE 30TH SEPTEMBER 1867.

133537

Bombay:
PRINTED AT THE "BOMBAY GAZETTE" PRESS.

1868.

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CONTENTS.

	Page
Members, &c. of the Chamber	i
Rules and Regulations of the Chamber	iii
Tonnage Scale at Bombay	vii
Rules and Regulations for Measurement by Callipers, upon shipments to Great Britain of Cotton &c. from Bombay ..	xi
General Rates of Commission	xiii
Ship Freights Inwards	xvi
General Meetings in 1866-67	xvii
ANNUAL REPORT of the Chamber	xxiii
Railway Projects for North-Western India	xxiii
Compulsory Registration of Partnerships	xxvi
Working of the Cotton Frauds' Act	xxvii
Adulteration of Sawginned Dharwar Cotton	xxxi
Adulteration of Cotton in Upper India	xxxii
Improvement of Cotton Cultivation	xxxiii
Cotton Statistics	xxxvi
Working of Cotton Traffic on the G. I. P. Railway ..	xxxvii
Wet Docks in Moody Bay	xxxviii
Revision of Stamp Duties	xxxix
Weights and Measures	xl
Railway Progress	xli
Revised Tariff Regulations	xli
Revision of present Drawback System	xli
Express to Calcutta on Arrival of Overland Mail	xliii
The Indo-European and Indian Telegraphs	xliii
Sir Bartle Frere	xliv
Miscellaneous	xlv
Funds of the Chamber	xlv
Conclusion	xlv

CONTENTS OF APPENDICES.

A.—RAILWAY PROJECTS FOR NORTH-WESTERN INDIA.

Page

Letter from Acting Secretary to Government to Bombay Chamber of Commerce 1
From Secretary to Chamber to Acting Secretary to Government, in reply 2
Minute of a Conference held at Chamber of Commerce on same subject... 8
From Acting Secretary to Government to Secretary to Chamber, relative to same 11
Minute by His Excellency the Governor 11
Minute by His Excellency Sir R. Napier, K.C.B., Commander-in-Chief 28
Minute by the Hon'ble B. H. Ellis 29
Minute by the Hon'ble C. J. Erskine 31
From Secretary to Chamber to Acting Secretary to Government, relative to projects above mentioned 33
From Secretary to Government to Secretary to Chamber, on same subject 33
From Lord Cranborne to the Hon'ble the Governor-in-Council, Bombay 34

B.—COMPULSORY REGISTRATION OF PARTNERSHIPS.

From Secretary to Chamber to Secretary to Government, Judicial Department 35
From Verjeewundass Madowdass and thirty others to Secretary to Chamber 38
Minute by Hon'ble Mr. Erskine 39
Minute by the Right Hon'ble the Governor 40
From Acting Under-Secretary to Government, Bombay, to Secretary of the Government of India, Simla 40
From Secretary to Chamber to Secretary to Bengal Chamber of Commerce 41
Similar Letter to Secretary to Madras Chamber of Commerce ... 42
From Secretary to Bengal Chamber of Commerce to Secretary to Government of India 42

HOME DEPARTMENT.

From Secretary to Government of India to Acting Under-Secretary to Government of Bombay 43
Copy of same forwarded to Secretary to Chamber 44
From Acting Under-Secretary to Government to Secretary to Chamber 44

Page

From Secretary to Government of India to Acting Chief Secretary to Government, Bombay 44
From Assistant Secretary to Government of India to Secretary to Bengal Chamber of Commerce 45

C.—WORKING OF THE COTTON FRAUDS ACT.

From Acting Inspector-in-Chief, Cotton Department, Bombay, to Secretary to Chamber 48
From Secretary to Chamber to the above, in acknowledgment ... 48
From Under-Secretary to Government to Secretary to Chamber ... 49
From Acting Inspector-in-Chief, Cotton Department, with accompaniments, submitting Annual Report of his Department 49
From Acting Inspector-in-Chief, Cotton Department, to Chief Secretary to Government, Bombay 52
Experimental Cotton growing 55
Statement showing Receipts and Disbursements of Cotton Improvement Fund in 1866 74
Statement of Cases tried during past year 76
Statement of Cotton Presses established throughout the Bombay Presidency in 1866 77
Statement of Cotton Gins worked by steam-power in the Bombay Presidency 78
Comparative Statement of area of land under Cotton cultivation, and estimated produce in 1866-67 80
Comparative Statement of the Monthly Expenditure in 1866, and estimated ditto for 1867 82
From Secretary to Chamber to Chief Secretary to Government, Bombay, respecting the working of the Cotton Frauds Act ... 84
From Chief Secretary to Government, Poona, to Secretary to Chamber 88
From Secretary to Chamber to the same, in reply 89

D.—ADULTERATION OF SAWGINNED DHARWAR COTTON.

From Secretary to Chamber to Acting Cotton Commissioner, Dharwar. 90
From Secretary to Chamber to Acting Inspector-in-Chief Cotton Frauds Department, Bombay, on same subject... 91
From Acting Cotton Commissioner, Dharwar, in reply to Letter of Secretary to Chamber 91
From the same, to Inspector-in-Chief, Cotton Department, Bombay, relative to the same subject 92
From Acting Cotton Commissioner, Dharwar, to Secretary to Chamber. 94
From Collector of Dharwar to Acting Cotton Commissioner, Dharwar. 94
From Secretary to Chamber to Acting Cotton Commissioner, Dharwar. 95
From Acting Inspector-in-Chief, Cotton Department, Poona, to Secretary to Chamber 95
From Secretary to Chamber to the same, in reply 96

E.—ADULTERATION OF COTTON IN UPPER INDIA.

From Under-Secretary to Government of Bombay to Secretary to Chamber, enclosing Extracts from the Proceedings of Government. 96

Page
From Secretary to Chamber to the same, in reply 101

F.—IMPROVEMENT OF COTTON CULTIVATION.

From Acting Under-Secretary to Government to Secretary to Chamber, relative to appointment of Mr. Rivett-Carnac as Cotton Commissioner for Central Provinces 103
Resolution of Government, ditto. 103
From Secretary to Chamber to Under-Secretary to Government, Revenue Department 109
From Collector of Ahmedabad to Secretary to Chamber, respecting Cotton Cultivation at Veetangaum 109
From Secretary to Chamber to the same, in reply 110
From Collector of Ahmedabad to Secretary to Chamber, on same subject 111
From the same to the same 111
From Secretary to Chamber to Collector of Ahmedabad, relative to the above 111
From Collector, Khandeish, to Secretary to Chamber, enclosing samples of cotton 112
From Secretary to Chamber to the same, in reply, giving report of Chamber on samples submitted 113
From Collector, Khandeish, to Secretary to Chamber, in acknowledgment 117
From Secretary to Chamber to the same, on same subject 119
From the same to the same 119
From Secretary to Chamber to Chief Secretary to Government, on same subject 121
From Chief Secretary, in reply 121
From H. F. M'Grath, Esq., Bhundarah, C. P., to Secretary to Chamber. 122
From Secretary to Chamber to same, in reply 122
From Ramchunder Vittal, Indore, to Secretary to Chamber 123
From Secretary to Chamber to same, in reply 123
From Acting Superintendent, Dharwar Factory, to Secretary to Chamber 123
From Secretary to Chamber to same, in reply 124
From Acting Cotton Commissioner, Dharwar, to Secretary to Chamber, enclosing samples 125
From Secretary to Chamber to the same, enclosing report of Chamber on samples 127
From Acting Superintendent, Dharwar, to Secretary to Chamber, in reply 128
From Superintendent, Dharwar Jail, to Secretary to Chamber... ... 128
From Secretary to Chamber to same, in reply 129
From Superintendent, Dharwar Jail, to Secretary to Chamber, on same subject ... ... 130.
From Secretary to Chamber to the same, in reply 130
From Cotton Commissioner of Central Provinces to Secretary to Chamber, enclosing specimens... 131
From Secretary to Chamber to same, in reply, with opinion of Chamber on samples 132
From Under-Secretary to Government of Bombay to Secretary of Chamber, regarding Cotton Cultivation in Shahpoor, enclosing extracts of Government Proceedings 133

Page
Resolution of Government 137
From Secretary to Chamber to Under-Secretary to Government, in acknowledgment 138

G.—COTTON STATISTICS.

From Chief Secretary to Government to Secretary to Chamber, enclosing extract of Government Proceedings 139
Resolution of Government 141
From the same to the same, with report on Cotton Crops in Southern Division of Bombay 142
Return of Cotton Cultivation, ditto. 153
Abstract of Cotton Return ditto. 155
Abstract of Return of Cotton Crop of '66, '67, of the Dharwar Zillah. 156
Resolution of Government 159
From Secretary to Chamber to Secretary to Government, in reply ... 159
From Secretary to Government to Secretary to Chamber, with report on Cotton Crops in Northern Division of Bombay 160
Return of Cotton Cultivation, ditto. 175
Abstract of Cotton Returns, ditto... 177
Abstract of Cotton Returns of the Bombay Presidency... 178
Abstract of Details of Exotic Cotton Cultivation in the Khandeish Zillah 179
Resolution of Government 180
From Secretary to Chamber to Secretary to Government, acknowledging receipt of report... 180
From Secretary to Government to Secretary to Chamber, regarding Cotton Cultivation in Sind 181
Tabular Statement of ditto... 182

H.—WORKING OF THE COTTON TRAFFIC ON THE G. I. P. RAILWAY.

From Major-General Rivers, Agent G. I. P. R., to Secretary to Chamber 185
From Secretary to Agent of G. I. P. R., to Secretary to Chamber ... 187
From Secretary to Chamber to the Agent of G. I. P. R., in reply ... 187

I.—WET DOCKS IN MOODY BAY.

From Bombay Municipal Commissioner to Secretary to Chamber ... 189
From the same to Secretary to Government, P. W. Department ... 189
From Executive Engineer to Bombay Municipal Commissioner, on harbour accommodation 191
From the same to the same... 194
From Acting Secretary to Government to Secretary to Chamber, on same subject 195
From the Consulting Engineer for Reclamations to Secretary to Government 197
From the same to the same... 205
Abstract of Correspondence on Bombay Dock Accommodation ... 207
From Bombay Municipal Commissioner to Secretary to Government, P. W. Department 212

Page

From Executive Engineer to Municipal Commissioner, submitting plan for Wet Dock 214
From Secretary to Chamber to Secretary to Government, on same subject 229
From the same to Under-Secretary to Government 231
Letter from Dock Committee to Secretary to Chamber... 231

K.—REVISION OF THE STAMP DUTIES.

From Under-Secretary to Government to Secretary to Chamber, with enclosures 233
From Secretary to Chamber to Under-Secretary to Government ... 236
From Under-Secretary to Government to Secretary to Chamber, in reply 236

L.—WEIGHTS AND MEASURES.

From Under-Secretary to Government to Secretary to Chamber, enclosing Government Memorandum 237
Resolution of Government 245

M.—RAILWAY PROGRESS.

From Secretary to Chamber to Major-General Rivers, Agent G. I. P.. 246
From Agent G. I. P. to Secretary to Chamber, in reply. 246
From Secretary to Chamber to C. Currey, Esq., Agent B. B. & C. I. Railway 248
From Agent B. B. & C. I. Railway to Secretary to Chamber, in reply. 248

N.—REVISED TARIFF REGULATIONS.

From Commissioner of Customs, Bombay, to Secretary to Chamber ... 250
From the same to the same 250
From Secretary to Chamber to Hon'ble J. Hunter, President of Tariff Committee... 251
From Secretary to Chamber to Commissioner of Customs, Bombay ... 251
Minute by Hon. A. J. Hunter.. 252

O.—REVISION OF SYSTEM OF DRAWBACK ON RE-EXPORTS.

From Commissioner of Customs to Secretary to Chamber.. 253
From Secretary to Chamber to Commissioner of Customs, in reply ... 253

P.—MAIL EXPRESS TO CALCUTTA.

From Postmaster-General, Poona, to Secretary to Chamber 255
From Secretary to Chamber to Postmaster-General, in reply 255

Q.—THE INDO-EUROPEAN AND INDIAN TELEGRAPHS.

From Capt. Hoskins, R.A., to Secretary to Chamber 257
From H. J. Walton, Esq., Kurrachee, to Secretary to Government, Bombay 257

Page
From Capt. Hoskins, R.A., to Secretary to Chamber 258
From Director General of Telegraphs in India, Calcutta, to Secretary to Chamber, with enclosure 259
From Secretary to Chamber to Director-General, in reply 261

R.—ADDRESS TO SIR H. B. E. FRERE.

Presentation of Address at Special General Meeting 262
Reply of Sir H. B. E. Frere. 264

S.—MISCELLANEOUS.

Aden Trade Report... 269
Zanzibar Trade Report 271

List of Pamphlets received by the Chamber during the year 1866-67. 280

Funds of the Chamber 282

Bombay Chamber of Commerce.

ESTABLISHED 22nd SEPTEMBER 1836.

List of Members.

Messrs. Bates (E.) & Co.
" Bell (R.), Miller & Co.
" Bell, Ventz, & Lucius.
" Blackwell & Co.
" Brice (A. C.) & Co.
" Burstall, Russell & Co.
" Campbell, Mitchell & Co.
" Classon (H.) & Co.
" Ewart, Latham & Co.
" Fell, Gregson & Co.
" Finlay, Clark & Co.
" Finlay, Scott & Co.
" Forbes & Co.
" Framjee, Sands & Co.
" Gaddum & Co.
" Graham (W. & A.) & Co.
" Gumpert, A. C.
" Hutchinson, Dods & Co.
" Killick, Nixon & Co.
" King (G. S. & Co.)
" Knoop & Co.
" Kuhn (L.) & Co
" Lawrence & Co.
" Leggatt & Co.
" Lyon Brothers & Co.

Messrs. Macdonald, Tweedie & Co.
" Macnee, Thompsen & Co.
" Nicol (W.) & Co.
" Peel, Cassels & Co.
" Ralli Brothers.
" Rennie, Scovell & Co.
" Ritchie, Steuart & Co.
" Robinson & Co.
" Sassoon (D.) & Co.
" Siegfried & Co.
" Sigg (J.) & Co.
" Stearns, Hobart & Co.
" Volkart Brothers.
" Wadia (J. N.) Sons & Co.
" Wallace & Co
" Watson, Bogle & Co.
P. & O. S. N. Company.
The Chartered Bank of India, Australia, and China
The Chartered Mercantile Bank of India, London and China.
The Comptoir d'Escompte de Paris
The London, Asiatic and American Company, Limited.
The National Bank of India.

RETIRING COMMITTEE.

Hon'ble Alex. Brown, *Chairman.*
H. E. Astley, Esq., *Deputy Chairman.*
H. Somerville, Esq.
J. E. Grimm, Esq.
C. Gaddum, Esq.
A. D. Grant, Esq.
J. A. Anderson, Esq
} *Members.*

COMMITTEE FOR 1867-68.

Hon'ble G. Fogo.....*Chairman.*
James Bogie, Esq. .....*Deputy Chairman.*
C. Gaddum, Esq.
J. A. Anderson, Esq
T. E. Taylor, Esq
A. E. Ashley, Esq
F. Vix, Esq
} *Members.*

Messrs. William Nicol & Co., *Treasurers.*
James Taylor, Esq., *Secretary.*
Muckondrow Bhawoo, *Head Clerk.*

RULES AND REGULATIONS

OF THE

Bombay Chamber of Commerce.

Revised and adopted at a General Meeting held on the 1st of Dec. 1864.

I. That the object and duties of the Chamber shall be to encourage a friendly feeling and unanimity among commercial men on all subjects involving their common good; to promote and protect the general mercantile interests of this Presidency; to collect and classify information on all matters of general commercial interest; to obtain the removal, as far as such a society can, of all acknowledged grievances affecting merchants as a body, or mercantile interests in general; to receive and decide references on matters of usage and custom in dispute, recording such decisions for future guidance, and by this and other means assisting to form a code of practice for simplifying and facilitating business; to communicate with the public authorities, with similar associations in other places, and with individuals on all subjects of general mercantile interest; and to arbitrate between parties willing to refer to and abide by the judgment of the Chamber.

II. That all persons engaged or interested in mercantile pursuits desirous of joining the Chamber, and disposed to aid in carrying into effect the objects of the same, shall be admitted Members by the vote of a majority of not less than two-thirds of those voting at a General Meeting, as provided for in Rule III.

III. That one-forth of the firms constituting the Chamber shall be held sufficient to form any General Meeting when the same has been regularly called together,—one partner representing a firm; but two or more partners of one firm, being present, only to count as one Member of the Chamber. That seven clear days' notice shall be given before any resolution proposing changes in the Rules of the Chamber be brought forward, and that such notice be given in writing to the Secretary, who shall circulate it for the information of the Members of the Chamber.

IV. That the Chamber reserves to itself the right of expulsion in case of need, to be decided at a General Meeting by a majority of three-fourths of the Members present at such General Meeting, duly convened.

V. The subscription of each firm or Member of the Chamber shall be Rupees 25 per month.

VI. That the affairs and funds of the Association be managed by a Committee of seven Members, consisting of the Chairman and Deputy Chairman of the Chamber and five Members, who shall be elected annually at a General Meeting of the Chamber in the month of September, and shall remain in office for one year, but be re-eligible on expiration of office. The Chairman and Deputy Chairman, as the case may be, to be *ex-officio* Chairman of the Committee, and in their absence the Committee to elect their own Chairman. Three to be a quorum. In the event of any Member of the Committee resigning or declining to serve, the remaining Members of the Committee shall fill up the vacancy.

VII. The Chairman, Deputy Chairman, and Members of Committee for election must be proposed at least seven days before the General Meeting to be convened for the purpose of elections, and their names be published in the rooms of the Chamber for that period, and by circular. No two Members of one firm shall be on the Committee at the same time.

VIII. That all questions before the Committee shall be decided by a majority, the Chairman having a second or casting vote in case of an equality of votes.

IX. That the Committee shall meet on Friday, or on such other day as may be found by them most convenient, of every

week, to receive and dispose of all communications and references, and to take under their consideration generally all matters embraced in the objects of the Chamber; and that their proceedings be laid on the table for the inspection of all Members, subject to such regulations as they may make.

X. That General Meetings of the Chamber be held quarterly for the purpose of discussing any measures of public interest which may arise, and that in the interval between the Meetings the Committee of the Chamber be intrusted with the selection of subjects for discussion at those meetings, and give notice of the same to the Members beforehand. That a special General Meeting shall be called by the Chairman, or by his order, seven days after the receipt of a requisition from any three firms Members of the Chamber; but that a majority of firms, represented by one or more Members from each firm, being Members of the Chamber, be required to constitute such General Meeting, and that the Annual General Meeting shall be held in the month of September, on such day as the Committee for the time being shall direct, such Meeting to be convened on a seven days' notice. That all General Meetings of the Chamber shall be advertised in the newspapers.

XI. That the Committee be authorised to provide suitable accommodation for the meeting of the Chamber, to pay all expenses of the establishment, and to control generally the management of the affairs of the Chamber.

XII. That all moneys or funds of the Chamber, as received, be paid into the hands of the Treasurer or Treasurers for the time being, and that the same be available by cheques signed by the Chairman, or in his absence by the Acting Chairman, for the time being, and by one other Member of the Committee.

XIII. That a Secretary be appointed by a majority of Members, in such way as the Committee for the time being may point out; that it shall be the duty of such Secretary to keep the records and accounts of the Chamber, to collect subscriptions, handing the same over to the Treasurer, to conduct correspondence, and to act generally under the directions of the Committee.

XIV. That all the proceedings of the Committee be subject to approval or otherwise of General Meetings duly convened.

XV. That any stranger engaged or interested in mercantile pursuits, visiting the Presidency, may be introduced as a visitor by any Member of the Chamber inserting his name in a book to be kept for that purpose, but that a residence of two months shall subject him to the rule for the admission of Members.

XVI. *Honorary Members.*—Gentlemen distinguished for public services, or eminent in commerce and manufactures, may be elected Honorary Members of the Chamber, and as such shall be exempted from paying subscriptions.

XVII. That an Annual Report of the proceedings be made, and copies sent to the similar associations in India, China, and elsewhere.

XVIII. That the foregoing Rules be added to or altered only by a majority of Members of the Chamber.

XIX. That the firms whose signatures are attached be considered as acknowledging the "Bombay Chamber of Commerce," as now constituted, to represent their public and united interests.

XX. That the foregoing Rules be copied into a book, to be kept with the records of the Chamber, and be signed by all the Members, and that copies be printed and delivered to each firm.

TONNAGE SCALE AT BOMBAY.

At a General Meeting of Merchants held in the Offices of the Chamber of Commerce, Bombay, on the 6th of June 1856, convened by circular under the direction of the Committee of the Chamber, William Forsyth Hunter, Esq., Chairman of the Chamber, in the Chair—It was proposed by, Henry Scott, Esq., of Messrs. Finlay, Scott, and Co., seconded by John Campbell, Esq., of Messrs. Campbell, Mitchell, and Co., and unanimously carried. —"That from and after the 1st of January 1857 the following amended Scale be taken to regulate the Trade from Bombay and the Malabar Coast to the United Kingdom, in the absence of Special Agreement to the contrary:—

Articles.	To the Ton
Aloes, in kegs	16 cwt.
Alum, in bags	20 ,,
Annato, in cases	50 feet.
Apparel	50 ,,
Arrowroot, in cases	50 ,,
Asafœtida, in cases	50 ,,
Barilla	20 cwt.
Bees' Wax, in cases	50 feet.
Betelnut, in bags	16 cwt.
Blackwood, in straight square logs	50 feet.
Do. otherwise	20 cwt.
Books	50 feet.
Borax, in cases	50 ,,
Do. in bags	28 cwt.
Bullion	per cent.
Camphor, in cases	50 feet.
Canes, Rattans, in Bundles...	16 cwt.
Cardamoms in Bundles	50 feet.
Cassia Lignea, Fistula, and Buds	50 ,,
Chassum	10 cwt.

ARTICLES (continued).	To the Ton.
China Root, in cases.	50 feet.
Cigars	50 ,,
Cinnamon, in bales...	6 cwt.
Cinnamon, in cases	50 feet.
Cloves, in cases	50 ,,
Do. in bags or frazils	10 cwt.
Coals	20 ,,
Cocoa, in bags	12 ,,
Coculus Indicus, in bags	16 ,,
Coffee, in cases	50 feet.
Do. in bags or frazils	16 cwt.
Coir, in bales	50 feet.
Do. in bundles or loose	6 cwt.
Do. Rope in coils...	8 ,,
Colocynth, in cases	50 feet.
Colombo Root, in bags	14 cwt.
Copra, in robins	12 ,,
Coral, Rough (not Specimen), in bags	20 ,,
Cotton, in bales	50 feet.
Cowries, in cases	50 ,,
Do. in bags	20 cwt.
Cubebs	12 ,,
Cummin Seed, in cases	50 feet.
Cutch or Terra Japonica, in bags or baskets, unscrewed	16 cwt.
Dates, wet	20 ,,
Do. dry	16 ,,
Dragon's Blood, in cases	50 feet
Ebony, square and straight	50 ,,
Do. otherwise	20 cwt.
Elephants' Teeth, in cases	50 feet.
Do. in bundles	18 cwt.
Do. loose	20 ,,
Furniture	50 feet.
Galingals	12 cwt.
Galls, in bags	16 ,,
Do. in cases	50 feet.
Ginger, dry, in cases	50 ,,
Do. in bags	12 cwt.
Gram	20 ,,
Ground Nuts, shelled	16 ,,
Gums of all kinds, in cases...	50 feet.
Gum Olibanum, in bags	16 cwt.
Hurtall, in cases	50 feet.
Hemp, in screwed bales	50 ,,
Do. loose or in bundles	7 cwt.
Hides and Skins in screwed bales	50 feet.
Do. loose and in small bundles	12 cwt.
Horns, Buffalo and Cow, loose	16 ,,

ARTICLES (*continued*).	To the Ton.
Horns, Deer, loose...	8 cwt.
Horn Tips, of any kind	16 ,,
Indigo, in cases	50 feet.
Jackwood...	50 ,,
Lac Dye, in shells or cases...	50 ,,
Linseed, in bags	18 cwt,
Mace, in cases	50 feet.
Mother-o'Pearl, in cases	50 ,,
Do. in bags	20 cwt.
Munjeet or Madder Root, in cases or bales	50 feet.
Do. in bundles or bags... ...	12 cwt.
Musk, in cases	50 feet.
Myrabolams, in bags	16 cwt.
Nutmegs, in cases...	50 feet.
Nux Vomica in cases	50 ,,
Do. in bags	16 cwt.
Oil of any kind, in casks	...210 im. gals.
Oil Seeds, Teel, Rape, Mustard, Khorassan, and Castor.	17 cwt.
Opium	per chest.
Paddy, in bags	16 cwt.
Pepper, in bags	16 ,,
Pimento	14 ,,
Plumbago, in bags	20 ,,
Rattans, in bundles	16 ,,
Do. Ground	16 ,,
Red Wood	16 ,,
Rhubarb, in cases	50 feet.
Rice, in bags	20 cwt.
Safflower, in cases...	50 feet.
Do. in screwed bales...	50 ,,
Do. in bags	10 cwt.
Sago, in cases	50 feet.
Sal Ammoniac, in cases	50 ,,
Do. in bags	18 cwt.
Saltpetre	20 ,,
Sandal and Sapan Wood	16 ,,
Sealing Wax, in cases	50 feet.
Senna, in bags	6 cwt.
Do. in bales	50 feet.
Shells, Rough, in bags	20 cwt.
Silk, in bales	10 ,,
Do. in cases	50 feet.
Soap, in cases	50 ,,
Sugar, in bags	20 cwt.
Talc	20 ,,
Tallow	50 feet.
Tamarinds	18 cwt.
Tea, in chests	50 feet.

ARTICLES (*continued*).	To the Ton.
Timber, Teak, Square Planks and Poon	50 feet.
Do. Round, one-fifth off.	
Tobacco, in bales	50 ,,
Tortoise Shells, in chests	50 ,,
Turmeric, in bags	13 cwt.
Tutenague	20 ,,
Unrated Wood	14 ,,
Whanghees (*vide* Canes)	16 ,,
Wheat	20 ,,
Wines and Spirits, in casks	50 feet.
Do. in cases	50 ,,
Wool, in screwed bales	50 ,,
Zedory	20 cwt.

*** The Standard Ton at Bombay for Measurement Goods shall be taken at 50 cubic feet.

Proposed by James Fleming, Esq., of Messrs. W. Nicol and Co., and seconded by William Trevor Roper, Esq., of Messrs. Lawrence and Co., and carried unanimously,—"That the Freight on Oil be paid on the full gauge of the Cask, ascertained at the port of discharge."

Proposed by Thomas Stock Cowie, Esq., of Messrs. Remington and Co., and seconded by John Parsons, Esq., of Messrs. Cardwell, Parsons, and Co., and carried unanimously—"That when Freight is payable on weight the same is to be on the Nett Weight delivered."

(Signed) W. F. HUNTER,

Chairman.

RULES AND REGULATIONS

For the Measurement by Callipers, upon Shipments to Great Britain, of Cotton, Wool, Hemp, and other Screwed and Pressed Bales at this Port.

I. That Callipers shall from time to time be submitted to the Secretary of the Chamber of Commerce, and if found correct shall be branded with a Stamp bearing the name of the Chamber, to indicate the same.

II. That if, from use or otherwise, any Callipers should get out of order and be objected to, the party objecting shall send the Callipers to the Chamber for examination, and should the objection be valid, the Chamber Stamp shall be defaced by the Secretary; if, however, the objection is found to be groundless, the Secretary shall give a note to that effect, and the party objecting shall be bound by his decision.

III. That any Callipers found incorrect, and on which the Stamp has been defaced, may be re-stamped after adjustment.

IV. That no measurements shall be held good except such as are taken by Callipers bearing the Chamber's Stamp.

V. That Cotton, Hemp, Wool, and other screwed bales shall be measured as follows: namely, the greatest length to be first ascertained, and then the Bale to be set on either end, as the Shipmaster may wish, and cross measurements to be taken at top over the lashings, excepting the knots, and as near the centre of the bale as possible. That an average of 100 bales be struck by ascertaining the actual measurement of any 10 bales, and proportionately, the Shipper selecting and measuring one-half, and the Shipmaster the other half; should, however, any dispute or difficulty arise in the selection of bales, either party to have the option of measuring the whole quantity.

VI. That all produce subject to measurement be measured within the day on which it has been ordered to be screwed, provided the order has been given by the Shipmaster or Agents of the Vessel; and that from 1st June to 15th October the same be measured at the Screws; during the remainder of the year, if required, on the Bunder, weather permitting. No Cotton, Wool, or other goods to be measured until a Custom House Pass has been obtained for the same.

VII. That in the event of the Shipmaster not attending to measure at such hour as may have been appointed by him, the Agent or Agents of the Ship do empower a person to attend on his behalf, whose sanction to the measurement shall be binding upon the Shipmaster.

GENERAL RATES OF COMMISSION.

Table of General Rates of Commission chargeable in Bombay, as revised by the Chamber of Commerce, and confirmed at a General Meeting held on the 11th February 1843.

		Per cent.
1.	On procuring freight ... ... Brokerage, when actually incurred, shall be considered a legitimate charge in ship's accounts.	5
2.	On collecting freight	2½
3.	On tendering a vessel (if accepted) for the conveyance of troops; on the amount of the charter party.	5
4.	On shipping goods of every description on which no commission for the purchase has been charged ...	2½
5.	On shipping treasure, bullion, and jewellery	1
6.	On ship's disbursements when in funds	1
7.	On ship's disbursements when not in funds	2½
8.	On account of passage money, whether the same passes through the Agent's hands or not	2½
9.	On effecting insurance	½
10.	On settling insurance losses, whether partial or total, also on procuring return of premium, exclusive of commission on receipt of cash...	2½
11.	On the sale or purchase of goods of all denominations (except as under)...	5
12.	On purchases of all kinds with the proceeds of goods sold, and on which a commission of 5 per cent. has been previously charged...	2½
13.	On the sale or purchase of ships, houses, and lands, of opium, and of diamonds, pearls, and jewellery of all descriptions...	2½
14.	On the sale or purchase of treasure or bullion	1

		Per cent.
15.	On the sale or purchase of cattle	5½
16.	On goods consigned which are disposed of by outcry or sent to a shop, on net proceeds	5
17.	On goods consigned and afterwards withdrawn, invoice cost	2½
18.	On guaranteeing the responsibility of person to whom goods are sold, on the amount of sale...	2½
19.	On attending the delivery of contract goods to the company or individuals	2½
20.	On collecting house-rent	2½
21.	On sale or purchase of private bills of exchange ...	1
22.	On effecting remittances by bills of exchange	1
23.	On taking up at interest bills from the Company, exclusive of one per cent. on remitting	1
24.	On exchanging Company's securities of all descriptions, or investing money therein, and on transferring Government paper from one constituent to another	½
25.	On surrendering or depositing in the Treasury Company's security of all descriptions	½
26.	On procuring money on *respondentia* or on loan ...	2
27.	On recovering of bonds, or of bills for absentees overdue at the time of their being placed in the possession of the Agent	2
28.	On debts when a process at law by arbitration is necessary	2½
29.	On debts when recovered by such means	5
30.	On managing the affairs of the estate for an executor or administrator	5
31.	On recovering funds from a bankrupt estate	2½
32.	On guaranteeing bills, bonds, or debts in general, by endorsement or otherwise...	2½
33.	On bills of exchange returned noted or protested ...	1
34.	On granting and cashing letters of credit	2½
35.	On becoming security to Government or public bodies in any case	2½
36.	On depositing Government paper as security for constituents	1

		per cent.
37.	On receipt or payment, at the option of the Agent, of all moneys not arising from proceeds of goods on which commission has been previously charged ...	1
38.	In all cases where the debtor side of the account exceeds the creditor side, including the balance of interest, commission to be charged at the rate of	1

NATIVE CONSIGNMENTS.—By a Resolution of the Chamber passed unanimously on the 29th of March 1866, it was ruled "that the recognised rate of Commission in England on the sale of Consignments from Bombay taken after this date be 3½ per cent., exclusive of brokerage and guarantee, and that the same be added to the Scale of Commissions sanctioned by the Chamber.

SHIP FREIGHT INWARDS.

WITH reference to the payment of Inward Freight at Bombay when stated in Sterling, we the undersigned Merchants do hereby agree that for the future all such Freight falling due under Bills of Lading dated on or after the 1st of November next shall (in the absence of Special Agreement, *or when stated to be payable at the current rate of exchange*) be paid and received by us at the rate of Two Shillings per Rupee.

It is understood that the Agreement dated February 1849 shall continue to regulate the payment of all the Freights falling due under Bills of Lading dated previous to 31st of October next.

(Signed) FORBES & Co.
,, REMINGTON & Co.
,, LECKIE & Co.
,, LEGGATT, MCKENZIE, & Co.
,, PEEL, CASSELS, & Co.
,, FINLAY, SCOTT, & Co.
,, LAWRENCE & Co.
,, A. H. HUSCHKE & Co.
,, DIROM, HUNTER, & Co.
,, STEVENS BROTHERS.
,, G. PERRY & Co.
,, J. P. LANGLOIS, A. LE ROY & Co.
,, ROBERT STRONG & Co.
,, EDWARD BATES & Co.
,, GREY & Co.
,, VINAY, FILS & Co.
,, HEYCOCK & Co.
,, WILLIAM MCHAFFIE & Co.
,, HASTINGS HICKS, SIM & Co.

(Signed) VOLKART BROTHERS.
,, RENNIE, SCOVELL & Co.
,, LYON, BROTHERS & Co.
,, WM. NICOL & Co.
,, MARTIN, YOUNG & Co.
,, RITCHIE, STEUART & Co.
,, MACINDOE, ROGERS & Co.
,, CARDWELL, PARSONS & Co.
,, W. & A GRAHAM & Co.
,, ROBERT FRITH & Co.
,, WALLACE & Co.
,, MCCULLOCH & Co.
,, EWART, LATHAM & Co.
,, CAMPBELL, MITCHELL & Co.
,, W. C. SILLAR & Co.
,, KILLICK, NIXON & Co.
,, GEORGE POLLEXFEN & Co.
,, T. R. RICHMOND.

Bombay, August, 1858.

GENERAL MEETINGS IN 1866-67.

A SPECIAL GENERAL MEETING of the members of the Chamber of Commerce was held on Tuesday the 30th October 1866, at 3 P. M., for the purpose of electing a Chairman in the room of W. Christian, Esq., resigned.

Present.

H. E. Astley, Esq., Deputy Chairman, in the Chair.

A. D. Grant, Esq.
A. Stewart, Esq.
C. Gaddum, Esq.
H. Somerville, Esq.
W. E. Crum, Esq.
O. Muller, Esq.
Alex. Brown, Esq.
H. Tippet, Esq.
E. Pennell, Esq.
C. Peel, Esq.,
Nanabhoy Byramjee, Esq.

James Taylor, *Secretary.*

The circular convening the Meeting having been read by the Secretary,

It was proposed by Alexander Brown, Esq., of Messrs. W. Nicol & Co., and seconded by Alexander Stewart, Esq., of Messrs. Finlay Scott & Co., and carried unanimously—

"That the Hon'ble A. J. Hunter, of Messrs. W. and A. Graham & Co., be re-elected to the office of Chairman."

There being no other business before the meeting, it was dissolved after a vote of thanks to the Chairman.

A SPECIAL GENERAL MEETING of the members of the Chamber of Commerce was held on Saturday the 9th February 1867, at 12 o'clock noon, to consider a proposal of Mr Russel

Aitken for the construction of Wet Docks in Moody Bay; and an address to His Excellency Sir H. B. E. Frere, G.C.S.I., K.C.B., on his retirement from the office of Governor of Bombay.

Present:

Hon'ble A. J. Hunter, Chairman.

H. E. Astley, Esq., Deputy Chairman.

H. Somerville, Esq.
A. D. Grant, Esq.
C. Gaddum, Esq.
C. W. Russell, Esq.
A. Havenith, Esq.
T. H. Moore, Esq.
J. M. Flanagan, Esq.
W. H. Nicholson, Esq.
D. Graham, Esq.
A. F. Wallace, Esq.
D. Watson, Esq,
J. Windram, Esq.
Nanabhoy Byramjee.
Alex. Stewart, Esq.
A. C. Gumpert, Esq.
H. D. Dods, Esq.
H. Muller, Esq.
L. Hoyer, Esq.
Hamilton Maxwell, Esq.
H. W. Beauford, Esq.
J. E. Grimm, Esq.
P. A. R. Oldfield, Esq.
J. Smith, Esq.
A. C. Brice, Esq.
N. M. Wadia, Esq.

J. Taylor, Secretary.

The circular convening the meeting having been read by the Secretary,

The following firms were duly ballotted for and admitted members of the Chamber—

Messrs. Bell, Ventz and Lucius, proposed by Messrs. Knoop & Co., seconded by Messrs. H. Classon & Co., Messrs. Stearns, Hobart, & Co., proposed by Mr. Alexander Stewart of Messrs. Finlay, Scott & Co., seconded by Mr. W. Christian, of Messrs. Peel, Cassels & Co.

The Chairman then proposed that an address be presented to His Excellency Sir H. B. E. Frere on the occasion of his retirement from the office of Governor of Bombay, which was seconded by Mr. H. E. Astley, Deputy Chairman, and carried unanimously.

The Secretary was then called upon to read the draft of an address that had been prepared under the instructions of the Committee, which having been done,

It was proposed by Mr. Alexander Stewart, seconded by Mr. Hamilton Maxwell, and carried unanimously—

"That the address now read be adopted and presented to His Excellency as the farewell address of the Bombay Chamber of Commerce."

The Chairman next introduced the subject of Mr. Russel Aitken's Wet Docks scheme.

After a full discussion of the subject by the members present, it was moved by Mr. A. D. Grant and seconded by Mr. C. Gaddum—

"That this Chamber considers that Wet Dock accommodation is urgently required by the necessities of the Port owing to the inefficient system of lighterage at present adopted; that Mody Bay is the most favourable site from a commercial point of view for the construction of such docks, and that the Agency best suited for their construction is a Dock Trust; but the Chamber does not feel itself competent to offer an opinion on the engineering facilities and difficulties of the site in Mody Bay."

It was then proposed as an amendment by Mr. A. F. Wallace, and seconded by Mr. Hamilton Maxwell—

"That a committee be appointed to consider the question of the expediency of Docks being constructed in Bombay, considering especially Mr. Aitken's scheme for Docks, and that the Committee report upon the subject to the Chamber within three months from this time."

The Chairman then put the amendment and the resolution to the meeting, when the former was carried by a large majority.

The following gentlemen were then appointed to form a Committee on the subject and to report to the Chamber, viz.—

Messrs. A. F. Wallace, Alexander Brown, A. D. Grant, C. Gaddum, and D. Graham

There being no other business before the meeting it was dissolved after a vote of thanks to the Chairman.

A SPECIAL GENERAL MEETING of the Members of the Chamber of Commerce was held on Saturday the 30th March 1867 at 12 o'clock noon, for the purpose of electing a Chairman in the room of the Hon'ble A. J. Hunter, resigned in consequence of being about to proceed to Europe.

PRESENT.

Hon'ble A. J. Hunter in the Chair.

H. E. Astley, Esq., Deputy Chairman.

Alexander Brown, Esq.	A. C. Brice, Esq.
W. Christian, Esq.	J. M. Flanagan, Esq.
J. A. Anderson, Esq.	T. E. Taylor, Esq.
John Sands, Esq.	G. A. Kittredge, Esq.
G. Burstall, Esq.	J. Bogie, Esq.
H. E. Tippet, Esq.	D. Watson, Esq.
E. Pennell, Esq.	A. E. Ashley, Esq.

James Taylor, Secretary.

The Circular convening the Meeting having been read by the Secretary,

Messrs. Forbes and Co. were, on the motion of the Hon'ble A. J. Hunter, seconded by Mr. Alexander Brown, balloted for and unanimously elected members of the Chamber.

The Chairman said the next question before the Chamber was the election of a Chairman, and he had much pleasure in proposing Mr. Alexander Brown as his successor.

Mr. Astley seconded the motion, which was carried unanimously.

The Chairman said the Members of the Chamber were aware that some time ago a Sub-Committee was appointed to consider the question of the construction of Docks in Bombay. There was no reference to this subject in the circular calling the meeting, but since the appointment of this Committee by the Chamber Government had appointed a Committee to consider the question and had requested the Chamber to nominate certain members of its own body and some other persons in Bombay interested in the shipping and commerce of the Ports, and it was desirable that the Chamber should act in concert with the Government in this matter.

It was then proposed by the Chairman, seconded by Mr. W. Christian, and unanimously agreed to—

"That the Sub-Committee appointed by the Chamber and such other persons as might be selected to act with them be merged in the Government Committee, and should co-operate with them in their proceedings."

Mr. J. Bogie moved that the best thanks of the Chamber be awarded to the Hon'ble Mr. Hunter for the services he had rendered to the Chamber, which was seconded by Mr. Christian and carried with acclamation.

The Chairman briefly returned thanks and the meeting terminated.

THE ANNUAL GENERAL MEETING of the members of the Chamber of Commerce was held at the offices of the Chamber on Monday the 30th of September 1867.

PRESENT.

Hon'ble Alexander Brown, Chairman.
H. E. Astley, Esq., Deputy Chairman.

A. D. Grant, Esq.	C. MacDonald, Esq.
J. A. Anderson, Esq.	W. Christian, Esq.
C. Gaddum, Esq.	F. Vix, Esq.
W. E. Crum, Esq.	W. F. Stearns, Esq.
D. Graham, Esq.	James Bogie, Esq.
H. E. Tippet, Esq.	D. Watson, Esq.
R. E. Bickerdike, Esq.	A. E. Ashley, Esq.
T. E. Taylor, Esq.	J. Windram, Esq.
H. Somerville, Esq.	Nanabhoy Byramjee, Esq.

James Taylor, Secretary.

The notice convening the Meeting having been read by the Chairman,

The following firm was proposed and admitted a Member after a ballot—

Messrs. Blackwell & Co., proposed by Mr. R. V. Reid, of Messrs Finlay, Scott & Co.; seconded by Mr. H. E. Astley, of Messrs. Ewart, Latham & Co.

The Chairman then called upon the Secretary to read the report of the outgoing Committee, which having been done,

Mr. W. Christian moved that the report now read be received with thanks and printed for general information, together with the documents therein referred to.

Mr. James Bogie seconded the motion, which was carried unanimously.

Mr. J. Windram moved—"That the Members of the Committee retiring are entitled to, and now receive the thanks of the Chamber for their attention to its interests during the year of office now expired"—which was seconded by Mr. F. Vix and carried unanimously.

The Chairman said the next business was the appointment of a Committee for the ensuing year, and he had great pleasure in moving the following resolution—That the Committee for the ensuing year be as follows:—

The Hon'ble G. Foggo, of Messrs. Forbes and Co.....	*Chairman.*
James Bogie Esq., of Messrs. Wallace and Co.....	*Deputy Chairman.*
C. Gaddum, Esq., of Messrs. Gaddum and Co.....	*Members.*
J. A. Anderson, Esq., of Messrs. Finlay, Clark and Co.	
T. E. Taylor, Esq., of Messrs. Lawrence and Co.....	
A. E. Ashley, Esq., of London Asiatic and American Co.....	
F. Vix, Esq., of Messrs. Jules Seigfried and Co.....	

Mr. W. E. Crum, of Messrs. W. and A. Graham and Co., seconded the motion, which was carried unanimously.

The Chairman introduced the subject of the Trade Returns issued by the Chamber, which on their present plan were not considered satisfactory by the Members of the Chamber. He therefore moved that the matter be referred to a Sub-Committee to consist of the following gentlemen, viz., Messrs. James Bogie, W. Christian, W. Nicol, and David Watson, to take into consideration the subject of the Trade Returns now issued under the Superintendence of the Chamber, and in connection therewith the expediency of any alteration of the present rate of subscription to the Chamber.

Mr. A. D. Grant seconded the motion, which was carried unanimously.

The Secretary then read a letter from Messrs. W. Nicol and Co., addressed to the Committee, relating to certain points connected with ships' commissions and the remuneration of ship agents.

After some discussion on the subject the following resolution was submitted by Mr. J. Bogie, seconded by Mr. W. Christian, and carried unanimously—

"That Messrs. Hamilton Maxwell, W. F. Stearns, and James Bogie should be appointed a Sub-Committee to consider the subject comprehensively and report to the Chamber."

There being no other business before the Meeting it was adjourned after a vote of thanks to the Chairman.

ANNUAL REPORT.

YOUR Committee have now to report to the members of the Chamber on the principal topics which have engaged their attention during the official year just closed, before resigning their trust to their successors to be appointed at the present meeting.

RAILWAY PROJECTS FOR NORTH-WESTERN INDIA.

One of the first subjects of public importance which engaged the attention of your Committee on assuming office twelve months ago, was the question of the relative advantages of lines of railway from Kotree to Mooltan in the Indus Valley, and from some point on the B. B. and C. I. Railway in Guzerat, through Rajpootana to Delhi. The matter was brought before your Committee by Government in September last, when the Chamber was informed that what Government mainly desired was independent commercial testimony regarding the commercial value of both lines. Amongst the questions to which answers were desired were such as—What are the prospects of traffic on either line? To what great staples of traffic will the lines afford facilities; in particular how would they affect cotton, wool, grain, seeds, metal, salt, and piece goods? How will they affect or be affected by existing lines of traffic, *e. g.* the river traffic on the

Indus, and the traffic by the Ganges Valley and G. I. P. Railway lines? To what extent will the Indus Valley line promote traffic on the existing Sind and Punjab lines? And how far do the Indus Valley and Rajpootana lines subserve different lines of traffic, or to what extent, and for what kinds of traffic, will they be competing lines? In considering this subject in its various bearings, your Committee thought it a matter of great importance to ascertain the views of the native merchants in Bombay connected with the trade of the contries that would be opened up by the proposed lines of railway, and to glean from them all facts they might be able to lay before your Committee from their own experience, in reference to the character of the present trade, and the manner in which it was likely to be affected by the introduction of lines of railway. A meeting with some of the principal native merchants and bankers connected with Rajpootana and North India, was accordingly held at the office of the Chamber at the end of October last year, of a very interesting character, at which valuable evidence was given in reference to the important influence the proposed railways were likely to have in opening up trade where no Export Trade at present existed, and in improving and extending it in districts of country as yet only partially opened. Your Committee, after carefully weighing the opinions and fact that had been laid before them, adressed Government in November last, to the effect that both lines were urgently needed, and that they should be proceeded with simultaneously. The Indus Valley line your Committee considered was needed to meet the growing wants of Sind itself, the increasing trade with Central Asia, and the transit requirements for the agricultural products of the Punjab, which of late have been so remarkably devolped. The

Rajpootana Line was considered as being no less urgently required, for the convenience of an import trade of great value, that has long existed, which suffers from the difficulties of existing means of inland transit, and which with railway communication may, on the evidence of those who are thoroughly conversant with the trade and the habits of the people, be expected to expand to an indefinite extent. In addition to this, it was said the Rajpootana Railway would have the effect of calling into existence a trade in some of the most valuable articles of Indian produce, between Bombay and other places in British territory—with districts of country in the Western parts of Central and Northern India, with which we have at present no such trading relations. The letter in which the opinions of your Committee on these railway projects were expressed, was printed and duly circulated amongst the members of the Chamber immediately after it had been handed into Government. In February last the Government of Bombay courteously forwarded to the Chamber a copy of the Secretary of State's despatch, dated 16th January last, in which he stated that the communication from the Chamber would be considered in connection with others on the same subject. Since then the members of the Chamber are, no doubt, aware that thorough surveys of the proposed line from Baroda to Delhi have been ordered to be proceeded with, without delay, but it would appear the proposed Indus Valley line has been for the present deferred.—(*Appendix* **A.**)

COMPULSORY REGISTRATION OF PARTNERSHIPS.

The last Annual Report of the Chamber referred to the importance of this subject, and the necessity of dealing with it at an early date. It was especially brought to the notice of your Committee by one of its members in a letter addressed to the chairman, and shortly afterwards a memorial from some of the principal native merchants and bankers was presented to your Committee approving of what had been said on this subject in the report laid before the last general meeting expressing a strong opinion as to the necessity of an enactment to compel a registration of all partnerships, as also the publication of deeds of trust, or gifts; and begging the Chamber to take the matter into consideration with a view to pressing the same on the immediate attention of Government. These papers were duly circulated amongst the members of the Chamber for their information, and an expression of their opinions invited. The request of your Committee on this point was cordially responded to, and a unanimous opinion expressed that action should be promptly taken. Your Committee accordingly addressed Government in terms of the opinions expressed by the members, handing up at the same time copy of the memorial from the native merchants, and requesting that His Excellency the Governor in Council would press the question on the attention of the Government of India with a view to legislation at the earliest possible date. Copies of the native memorial and your Committee's letter to the Government of Bombay were forwarded to the Bengal and Madras Chambers, with a request that they would give their valuable aid to the movement, by addressing the Government of

India in support of it. Your Committee have pleasure in acknowledging the promptitude and ability with which these Chambers entered into the movement. The Bengal Chamber in a letter addressed to the Government of India under date 23rd March last, expressed their cordial concurrence in the "representation of the Bombay Chamber, and earnestly desired to support the movement which they have initiated;" and the Madras Chamber, in their communication to the Government of India expressed themselves to the same effect. A few weeks ago your Committee received through the Government of Bombay a communication from the Government of India under date 3rd August requesting its opinion on certain points noted therein. This communication has been remitted to a Sub-Committee for consideration and report, so that the matter will come before our successors for ultimate disposal. *(Appendix* **B.***)*

WORKING OF THE COTTON FRAUDS' ACT.

During the present year your Committee consulted the members of the Chamber by circular on more than one occasion, in reference to points connected with the working of the Cotton Frauds' Act, which had been raised both by Government and the Cotton Frauds' Department. In February last a memorandum by the Senior Cotton Inspector, on the subject of cotton adulteration and the character of much of the cotton pressed by natives in Bombay, accompanied by extracts from the press books kept by the Department, was circulated to members, who were invited to offer sug-

gestions as to how these press extracts might be prepared so as to be of some practical use. In the following month an expression of opinion on the part of the Chamber was called for by Government, with reference to a paragraph in the Government Resolution, dated 28th May 1866, as to the expediency of making a change in the Cotton Frauds' Act, so as to enable the surplus funds to be applied "to the purchase of improved machinery and other objects for the general advancement of the cotton trade." The result was a very full expression of opinion from the members, not merely on the points on which they were more especially consulted, but also on the general principle and the working of the Act itself, so that when the annual report of the Chief Cotton Inspector, for the year 1866 was published in May last, and the attention of the Chamber was drawn by Government to some points connected with the report in the Government Resolution passed upon it, your Committee were in a position to give expression to the views of the members on these and all other points on which it was deemed expedient to express any opinion. These were to the following effect:—That the members of the Chamber were generally of opinion that the Act, in so far as its provisions had been strictly adhered to, had not been productive of the good to the cotton trade which its framers seem to have expected. That the improvement in Indian cotton, which was on all hands admitted to have taken place, was by no means attributable solely to the working of the Act. That this improvement had resulted from a variety of causes—from the exertions of Government officers unconnected with the department, but under whom were employed Inspectors appointed

under the Act to do useful work not contemplated by the provisions of the Act; from the opening up of railway communication into the heart of the principal cotton districts; from the impetus given to trade by the establishment of European agencies at the principal cotton marts in the interior; from the introduction of machinery for the better ginning of cotton, and for half, and full pressing in the districts; from the increase of wealth amongst the cultivators, which had emancipated them from their former condition of dependence on the sowcars; and from the Indian grower having been again brought into competition with America in a market in which during the early history of the working of the Act, the Indian growers virtually enjoyed a monopoly. That the exceptional state of matters which called the Act into existence had passed away, and it was now a question for consideration, whether it was right or expedient to continue to tax trade by the maintenance of the present costly system. That a considerable section of the Chamber, impressed with the false principle of the Act and of its practical inutility, were desirous of seeing it repealed; but believing at the same time that the dread of detection and punishment had operated as a deterrent to fraud, both in Bombay and in the Mofussil, a majority of the members appeared to be of opinion that immediate repeal might be attended with danger, and that it would in the mean time be preferable to alter or amend the Act, so as to admit of the establishment being incorporated with that of the Cotton Commissioner, and the fund made available for such purposes as those contemplated in the Government Resolution of 28th May 1866. The Act would thus gradually lose its character of a mere police measure, and become, instead of a Cotton Frauds' Act, a Cotton Im-

provement Act. The proposal to raise the present fee from three to four annas per bale, your Committee represented to be inadvisable and unnecessary, and pointed out that at the present price of cotton, Rs. 200 and less, per candy, the present charge amounts to about a quarter per cent. It was farther stated that the principle of mulcting the exporter in aid of a fund devoted to the improvement of cotton, the profit of which improvement accrued to the grower in the enhanced price he received for his produce, was open to serious objection, and your Committee expressed a hope that Government in dealing with this matter might consider how the cotton trade might be relieved from the impost altogether. These in substance were the views set before Government as those of the members of the Chamber on the existing Cotton Frauds' Act. In February last your Committee were referred to by the Inspector-in-Chief, Cotton Department, for an expression of the opinion of the Chamber as to whether it would be for the benefit of the cotton trade that the officers of the Cotton Frauds' department should proceed against persons, who, it was said, systematically affixed false marks on cotton bales, that is by affixing marks denoting a superior variety of cotton to that which is absolutely contained in the bales,—under section 487 of the Penal Code. In reply your Committee informed the chief inspector, that they did not consider the question of marks, as the cotton trade is carried on, a matter of the least consequence. In selling and buying cotton, marks are not considered, and in these circumstances it was a matter of comparative indifference what marks may be put on bales.—(*Appendix* **C.**)

ADULTERATION OF SAWGINNED DHARWAR COTTON.

The attention of your Committee was directed by a member of the Chamber, to a species of adulteration practised in the Dharwar Districts with the Sawginned Dharwar cotton which has the effect of detracting seriously from its value, and otherwise subjects merchants in Bombay to much trouble and loss. It seems from the representation made to the Chamber, that many docras of this cotton received in Bombay, contain a few pounds of ginning refuse or "*chup.*" The discovery is only made when the docras are opened at the presses when sent there for the purpose of being screwed. It is found to be almost impossible entirely to remove this rubbish, and the consequence is that a portion finds its way into many of the screwed bales sent to Europe. This representation was borne out by other firms having experience of Dharwar cotton, and your Committee lost no time in directing the attention of the Acting Cotton Commissioner (Mr. Walton), the Acting Inspector in Chief Cotton Frauds' department, and the Collector of Dharwar to this reprehensible practice, all of whom promptly responded to the representation of your Committee, and promised to do all in their power to have the evil complained of put a stop to as quickly as possible. Your Committee would direct the attention of their successors to an important matter which has been mentioned in the local papers—namely, the state into which the sawgins in the South Mahratta Country are falling. It appears that no proper steps are taken to repair or replace those that become destroyed or deteriorated by use, and that much of the inferiority noticed in the South Mahratta Country cotton this season, is attributable to this cause.—(*Appendix* **D.**)

ADULTERATION OF COTTON IN UPPER INDIA.

In June last an extract from the proceedings of the Bombay Government in the Revenue Department on the subject of the adulteration of Cotton in Upper India was submitted to the Chamber with a request for its opinion on an inquiry from the Punjab Government, in reference to certain forms of adulteration practised by native dealers, and as to the expediency of endeavouring to prevent those practices by an enactment similar to the Bombay Cotton Frauds' Act. Your Committee in reply represented to Government that in their humble opinion an enactment framed on the principle of the Bombay Cotton Frauds' Act would be a measure of questionable policy, and no remedy against the system of adulteration said to prevail in the North-west Provinces and the Punjab.

In reference to a quotation made in the letter from the Secretary to the Financial Commissioner of the Punjab, from the last Bombay Administration Report, to the effect that the Cotton Frauds' Act had been attended with "beneficial results" it was pointed out by your Committee that in their opinion these "beneficial results" were produced rather by the judicious application of the machinery called into existence by the Act to purposes connected with the improvement of cotton a matter not contemplated by the terms of the Act. The machinery of the Act, in so far as it had been applied to detect frauds and punish adulteration, had been almost inoperative. Your Committee farther stated that in their view of the matter the provisions of the Penal Code amply provide for the punishment of persons found guilty of adulterating cotton in the manner indicated in the Punjab letter, but they considered that much might be done for the improvement of the cotton grown in the Punjab and

North-Western Provinces by the introduction of a Cotton Improvement Department on a somewhat similar principle to the experiments of this character initiated by the Government of Bombay, and by Sir Richard Temple for the Central Provinces and the Berars.—(*Appendix* **E.**)

IMPROVEMENT OF COTTON CULTIVATION.

The interest now taken in the improvement of cotton cultivation in all parts of the Bombay Presidency, the Central Provinces, and the Berars, has been evidenced to your Committee in a very gratifying manner by the number of samples that have been submitted for report from the experiments carried on in almost every cotton district in Western India. The experiments initiated and carried on by Mr. Ashburner, the Collector of Kandeish, continue to keep the first place, alike in magnitude and importance. At the close of last year he submitted to the Chamber a number of samples from experiments made in various Talookas of the province of Kandeish, from Hingunghat seed, New Orleans seed acclimatised in Dharwar, Egyptian seed and some other varieties, on all of which your Committee reported fully. The experiments from Hingunghat seed were considered on the whole, of a very successful character, and of much promise for the future. The experiments with Egyptian seed did well; but those with New Orleans acclimatised seed were considered a failure. In the end of January last, Mr. Ashburner forwarded to the Chamber a very much larger sample of the cotton grown in Khandeish from Hingunghat seed, than had been previously submitted for inspection and report, and in reference to the sample and former reports,—raised the following points:—

"The question now arises, he said, having a cotton "(the new Kandeish cotton) of one uniform character, "which is generally admitted to be fully equal to "Oomrawuttee, is the Hingunghat cotton so much "superior to Kandeish as to make it advisable to "introduce it, and thus sacrifice the important element "of uniformity. In the event of my failing to super- "sede the present Kandeish crop *entirely*, what would "be the effect of a mixture of Hingunghat and Kan- "deish cotton? Are the two cottons of such different "qualities and character, that their mixture would "affect the value of both? Would any alteration be "required to spinning machinery to adapt it to the "mixture, and would it gin in a Platt's gin with faci- lity, and without injury to staple"? In reporting on the larger sample of Hingunghat cotton grown in Kandeish, and in reference to these inquiries, your Committee reported to the effect that the sample was of good colour, and the cotton well cleaned, that it was similar to Hingunghat both in strength and colour, but that the staple was, if anything, slightly shorter. That the present year's crop of cotton from Kandeish was not considered quite so good as the cotton of last year, though, of course, infinitely superior to the bad variety that had been superseded. Your Committee were of opinion, that if cotton similar to the sample grown from Hingunghat seed which had been submitted for report, could be produced generally throughout the province, it would be so great an improvement on even the new Kandeish cotton that it would be worth while to spend time and money in making an experiment on as large a scale as the Collector's knowledge of the province might lead him to consider expedient. Your Committee, however, thought it necessary to warn Mr. Ashburner, that in the event of his being unable to supersede the new Kandeish cotton by the proposed

to prevent any mixture of the two varieties, as any mixture of this sort would certainly lead to the injury of both kinds. He was further informed that none of the experiments he proposed making would affect spinning or ginning machinery, or make alterations in these matters in any way necessary. Your Committee asked Government to give its countenance and support to the proposed experiments of Mr. Ashburner, whose energy and public spirit in the cause of improved cotton cultivation in Western India, the Chamber desired cordially to acknowledge. From papers placed at the disposal of the Chamber by Government within the last few days, your Committee learn that the actual area under Hingunghat seed in Kandeish this season is 1,14,558 acres. Mr. Ashburner, in his letter to Government dated 1st August last, speaks in a very sanguine manner about the conclusive character of the experiment that has already been made, and hopes next season "to exterminate the present improved crop as "effectually as was done with the old Kandeish cotton."

Samples of cotton grown from Egyptian and from acclimated new Orleans seed, by Mr. Whittle, at Veerumgaum, were submitted to the Chamber for report by Mr. Oliphant, Collector of Ahmedabad. Both samples were of a superior character. Regarding the cotton from Egyptian seed, your Committee reported it was the finest that had been submitted to the Chamber of any cotton grown in Western India from Egyptian seed, and the sample from acclimatised New Orleans seed was considered about equal to the best Oomrawuttee. Your Committee have had no information whether these interesting experiments have been continued this season on any large scale. A variety of experiments have been made in the Dharwar districts submitted for report by Mr. Walton, Acting Cotton Commissioner; by Dr. Mackenzie, Superintendent of

experiment with Hingunghat seed, he should be careful the Jail at Dharwar (with Peruvian seed) and others which it is unnecessary to refer to in detail, but particulars of those of most interest are appended to the report.—*(Appendix* **F.***)*

COTTON STATISTICS.

The want of anything like carefully prepared statistics of the extent of land under cotton cultivation in the Bombay Presidency has long been felt by the merchants of Bombay and the attention of Government had been repeatedly called by the Chamber to the importance of information of this kind being carefully prepared and speedily made public for general information; but it is only quite lately that any serious attempt to meet the requirements of the public in this respect has been made. Mr. Walton, the acting Cotton Commissioner, when in Bombay at the close of last year attended a meeting of your Committee at which the subject was very fully discussed, when it was suggested to Mr. Walton that arrangements after some such plan as the following might with advantage be made. A report of the extent of land under cotton cultivation to be published not later than October. A brief report on the appearance of the crop to be published not later than the 1st December. A similar report to be published not later than the close of the year, and the annual report of the area under cotton cultivation in the presidency as early as possible in the new year. These suggestions were promptly laid before Government by Mr. Walton who farther suggested the advisability of orders being issued to Government servants in the Political Department to procure such information as might be obtainable of the quantity of cotton grown in native states, regarding which no reliable statistics are at present available. Government

consented to most of the suggestions, and gave orders for their preparation accordingly; and ordered that the information should be sent direct to the Cotton Commissioner, who should be authorised to publish the same in the *Government Gazette* without further reference to Government. The reports for the present year issued through the Revenue Commissioners were of a more elaborate and important character than any that had been published by Government before, and your Committee remarked, in expressing their acknowledgments to Government for these reports, that if they could hereafter be issued at an earlier date the information they contained would be a boon to the mercantile community.—(*Appendix* **G.**)

WORKING OF THE COTTON TRAFFIC ON THE G. I. P. RAILWAY.

Our predecessors in office in their report at the last annual meeting of the Chamber, congratulated the members on the improved arrangement in working the goods traffic on the G. I. P. Railway as compared with former years when the Chamber had so much occasion to make representations to Government regarding its inefficiency; and your Committee are happy to state, that during the season which closed in May last the improvement has not merely been continued, but also greatly extended. From a statement submitted by General Rivers to the Chamber in the end of May, it appeared that between the 1st of January and 30th April 1867 more than 1,500,000 maunds, or nearly 60,000 tons of cotton were carried an average distance of 350 miles. The quantity moved on the Railway during the same period in 1866 was 42,569 tons, showing an increase in 1867 of more than 16,000 tons. The prospects as regards the movement of cotton

in the coming season seem to be still more satisfactory. The agent informed the Chamber that next season there will be 275 miles of double line out of a total of 600, whereas this season, there was only 60 miles of double line out of 550. The railway will also have 50 per cent. more waggons, so that if there be a full crop in the districts of Central India and the Berars of 200,000 candies (70,000 tons) the company would be able to run it down to Bombay in three months, if necessary. In reference to the movement of cotton on the North-Eastern line of the G. I. P. Railway, your Committee have much pleasure in acknowledging the valuable assistance rendered to the cotton dealers and merchants by Mr. Rivett-Carnac, the Cotton Commissioner for the Central Provinces and the Berars, by the excellent arrangements he made for facilitating the transit of cotton from the districts to the principal stations on the Railway, and for storing it till it could be sent on from the outstations to Bombay. Mr. Rivett-Carnac supplied to the Chamber most useful returns every fortnight for a period of nearly three months, the returns being at the same time published in the newspapers; giving an account of the quantity received during that time at the Railway stations from the districts, the quantity exported by railway, and the quantity on hand remaining to be exported. It was also mainly through his exertions that the Hingunghat cotton seed was so promptly supplied for the large sowing that has taken place in Khandeish:—(*Appendix* **H.**)

WET DOCKS IN MODY BAY.

Early in the present year the attention of the Chamber was invited by the Municipal Commissioner to a proposal for a Wet Dock in Mody Bay by Mr.

Russel Aitken, the Executive Engineer to the Municipality. The scheme was taken into consideration at a general meeting of the members held on the 9th February last when after a very full discussion a Committee of members was appointed to consider the proposal and report upon it to the Chamber. Meantime Government shortly afterwards called the attention of the Chamber to the subject, forwarding at the same time two important letters from Colonel DeLisle R. E., upon it, and requested your Committee to favour Government with the names of any gentlemen who in the opinion of the Chamber should be appointed to investigate the subject in conjunction with Col. De Lisle, Mr. Russel Aitken, the Commissioner of Customs, and any other gentleman whose name the Harbour Board might wish to add. Your Committee in compliance with the request that had been made, suggested to Government the names of certain gentlemen, representing the various interests that had to be considered and were otherwise in the opinion of your Committee well qualified to afford Government the assistance it might need in deciding on this important question. The Chamber Committee was merged into the Committee appointed by Government—and it is understood that the decision come to by that Committee will shortly be published.—(*Appendix* **I.**)

REVISION OF THE STAMP DUTIES.

The Government of Bombay communicated to the Chamber in a resolution dated 29th May last a circular from the Government of India, intimating that in the next Session of the Legislative Council of his Excellency the Viceroy it will be proposed to amend and consolidate the whole law on the subject of Stamp Duties; together with a precis of certain suggestions

already made for the amendment of the Act; and requesting that the subject be taken into careful consideration and the conclusions on it submitted of an early date. Government requested the Chamber to nominate three members to serve on the Bombay Committee with the Commissioner of Customs, the Superintendent of Stamps, and the Registrar of the High Court for the purpose of considering the subject and furnishing the report asked for by the Government of India, a request which your Committee promptly complied with. This Committee has duly reported to Government though the report will probably not be made public till the subject comes forward for discussion in the Legislative Council of India.—(*Appendix* **K.**)

WEIGHTS AND MEASURES.

The subject of a uniform system of weights and measures for all India, which has of late years come so frequently before the Chamber in one form or other, was again brought under the consideration of your Committee in a letter from Government under date 14th August, submitting Memoranda on the subject by the Hon'ble M. J. Shaw Stewart, together with copy of the Draft Act he proposes to introduce on the subject into the Legislative Council of His Excellency the Viceroy. Your Committee handed over this scheme for consideration to a sub-committee of three members, who though they have not yet formally reported, have communicated the substance of their views to your Committee as being favourable to Mr. Stewart's proposal. Mr. Stewart purposes the pound Avoirdupois as the unit of weight, the imperial gallon as the unit of capacity, and the English yard for the unit of length. These proposals are commended by their simplicity, and as less objectionable than any other change that

could be introduced. The evil of the present system of Indian weights and measures, varying as they do in every district and province of India, it would be impossible to exaggerate, and as Mr. Stewart remarks it must have been remedied long since had it not been for the difficulty of deciding what scale to adopt. Your Committee trust the scheme in substance as proposed in Mr. Stewart's draft Act may in a very short time become the legal system of weights and measures throughout India.—(*Appendix* **L.**)

RAILWAY PROGRESS.

Your Committee have been favoured with a brief but interesting report from General Rivers on the present state of, and probable progress during the next twelve months with, the portions of the G. I. P. Railway which still remain to be completed; and from Mr. Currey, Agent to the B. B. and C. I. Railway regarding the present state of that line and certain proposed extensions of it, which will be found in the appendices to this Report. Your Committee regret to learn from General Rivers' letter that owing to heavy floods and other disasters the opening of the main line to Etarsee, 110 miles from the present terminus, which it was hoped would have been done in November must, be deferred, and that the whole line to Jubbulpore can hardly be expected to be opened till March 1869.—(*Appendix* **M.**)

REVISED TARIFF VALUATIONS.

The committee appointed by the Government of India for the revision of the tariff valuations last year assembled at Calcutta on the 15th October, and finished their labours at the close of the year. The recommen-

dations made by this Chamber and the Chambers of the other Presidencies for reductions in the former values fixed for metals, cotton piece goods, and twists, were concurred in by the committee, and their recommendations were generally adopted by the Government of India. The labours of the committee were usefully exercised in the manner in which they dealt with the removal to the free list of a number of petty articles which neither yielded, nor were ever likely to yield, any appreciable revenue. The committee recommended that all articles which were neither mentioned in the tariff nor in the *ad valorem* list of dutiable articles should be free. This measure, they said, "while it would not sacrifice any large amount of revenue, would add greatly to public convenience, would remove restrictions, and give encouragement to several branches of trade, and at the same time be a relief to the Customs Department in each Presidency." The late Chairman of the Chamber pointed out in his minute of last year, which was generally concurred in by the members, the inopportune character of the time for attempting to fix tariff values on cotton piece goods and twists; the committee recommended that the values they agreed on should be "subjected exceptionally to revision as soon as the result of the American cotton crop for 1867 should become known"—and all our experience since the close of last year confirms the necessity of now carrying out as promptly as possible this suggestion.—(*Appendix* **N**.)

REVISION OF THE PRESENT DRAWBACK SYSTEM.

The Commissioner of Customs submitted to your Committee a proposal for a revision of the present system of allowing drawback on dutiable goods when re-exported within a fixed period.

Your committee, on considering the views put before them, were unable to concur in the Acting Commissioner's proposal; they objected to the abolition of the right to claim drawback within a fixed period in the present state of affairs connected with the trade of the port, and after stating special reasons for rejecting the proposal, your committee pointed out that the present season was by no means a convenient one for raising the question, and that it might be postponed for a time with advantage in every way.—(*Appendix* **O**.)

EXPRESS TO CALCUTTA ON ARRIVAL OF THE OVERLAND MAIL.

The Chamber was consulted by the Postmaster General of Bombay as to the advantage to the mercantile community and the public of having the privilege of forwarding prepaid letters by the Special or Express Train that is despatched to Calcutta on the arrival of each Overland Mail, the letters to bear an express postage of four annas on each letter paid in stamps. Your committee in reply informed the Postmaster General that the proposed express would be a public advantage, and that the members of the Chamber would be glad to see it carried out according to the arrangements proposed in his letter to the Chamber. —(*Appendix* **P**.)

THE INDO-EUROPEAN AND INDIAN TELEGRAPHS.

The Chamber during the last two years had so often the ungracious duty to perform of pointing out the defective working of the telegraphs, that your committee have pleasure in stating that during the past year no complaints of the least importance have been

brought before them. The working of the Indian lines has been regular and on the whole very good. The same remark applies to the Indo-European telegraph, for though there have been interruptions occasionally of a tedious and annoying character, they have not been attributable to faults of management or the bad state of the line in so far as the Indian Direction is concerned, and of late messages have been arriving with rapidity and fair regularity. Colonel Goldsmid, the able Director General of the Indo-European telegraph, informed your committee when passing through Bombay in July last that the rules of the Paris Convention were being made applicable to the whole line from Bussorah to London, which would enable senders of messages to know what redress and from whom it will be obtainable when messages are rendered unintelligibly or fail to reach their destination.—(*Appendix* **Q**.)

SIR BARTLE FRERE.

At a General Meeting of the Members of the Chamber held on the 9th February last, an address was voted by acclamation to Sir Bartle Frere on the occasion of his retirement from the office of Governor of Bombay, as an expression of the sense entertained by the members of the services he had rendered to the interests of commerce in Western India, by the liberal policy which characterised his administration during his five years' rule. The address was presented to him at Parell on the 25th February, which with his reply will be found in the appendices to this report. (*Appendix* **R**.)

MISCELLANEOUS.

Papers of interest connected with the commerce of Aden, of Zanzibar, and other subjects of importance to the mercantile community received from Government will be found in the appendices to this report, so that it is unnecessary to describe them here in detail. Numerous references have been made to your committee during the year on points of importance to the mercantile and shipping interests, which were carefully considered and disposed of in the usual manner.—(*Appendix* **S**).

FUNDS OF THE CHAMBER.

The income has of late been barely equal to the expenditure, but there is a balance in the treasurer's hands of Rs. 5,780, which would be larger than usual, but that several accounts for printing and other charges have yet to be settled.—(*Appendix* **T**.)

CONCLUSION.

In conclusion, your committee on resigning their trust desire to express their acknowledgments to the members for their support and ready attention to all questions on which they have had occasion to consult them. During their term of office they have been in frequent communication with the Government of Bombay on many questions of commercial and public importance, and they have to return their respectful acknowledgments to His Excellency the Right Hon'ble the Governor in Council for the courtesy and consideration with which the opinions of the Chamber have been solicited and received.—(*Appendix* **U**.)

APPENDIX A.

RAILWAY PROJECTS FOR NORTH-WESTERN INDIA.

No. 1814 of 1866.

Railway Department.

To the Chamber of Commerce, Bombay.

Gentlemen,—I am desired by His Excellency the Governor in Council to request the favour of your furnishing Government, at your earliest convenience, with any statistical facts or opinions which you may be able to supply, relative to the advantages of lines of Railways from Kotree to Mooltan in the Indus valley, and from some point on the B. B. & C. I. Railway in Guzerat to Delhi.

2. You are no doubt aware that the Government of Bombay has, for some time past, consistently advocated the completion of both lines at the earliest possible period.

3. What is now desired, chiefly for the information of the Government of India, is independent commercial testimony as to facts, or reliable opinions (but especially facts), regarding the commercial value of both lines, either absolutely as regards either line without reference to or comparison with other lines, or comparatively.

4. For instance, among the questions to which replies are desired, are such as these :—

1. What are the prospects of traffic on either line ?

2. To what great staples of traffic will the lines afford facilities; in particular how will they affect Cotton, Wool, Grain, Seeds, Metal, Salt, and Piece Goods ?

3. How will they affect or be affected by existing lines of traffic—*e. g.*, the river traffic on the Indus, and the traffic by the Ganges valley lines, and G. I. P. Railway ?

4. To what extent will the Indus Valley line promote traffic on the existing Sind and Punjaub lines ?

5. How far do the Indus Valley and Rajpootana lines subserve different lines of traffic; or to what extent and for what kinds of traffic will they be competing lines? The lines will be 400 miles apart, is there any and what danger of their interests clashing.—I have the honour to be, Gentlemen, your most obedient servant,

W. KENDALL, Colonel R. E.,
Acting Secretary to Government.

Bombay Castle, 31st August 1866.

A 232 of 1866.

BOMBAY CHAMBER OF COMMERCE,
15th November 1866.

COLONEL W. KENDALL,
Acting Secretary to Government, Railway Department,
Bombay.

SIR,—I have the honour, by direction of the Committee of Management of the Chamber of Commerce, to acknowledge the receipt of your letter No. 1814 of 1866, requesting this Chamber to furnish Government with any "statistical facts or opinions "which it may be able to supply relative to the advantages of "lines of railways from Kotree to Mooltan in the Indus Valley, "and from some point on the B. B& C. I. Railway in Guzerat to Delhi."

2. In reply I am to state for the information of His Excellency the Governor in Council that this Chamber has long been of opinion that, on commercial grounds alone, lines of railway are absolutely indispensable for the development of the trade and the resources of the districts of country indicated in your letter under acknowledgement.

3. In reference to the Indus valley route,—the internal trade of Sind itself, the produce traffic from Afghanistan and the Punjab forwarde dthrough Sind to the sea ports of Kurrachee and Bombay, now suffer seriously from the present imperfect means of transit; and the requirements of trade with the countries in question cannot be adequately met till a trunk line of railway from Kurrachee to Mooltan and a branch from a well-selected point convenient for receiving the traffic from Central Asia, which arrives in Sind through the Bolan Pass, are completely carried out.

4. More than twenty-five years ago, when Sind was still foreign territory, the attention of this Chamber was attracted to the prospect of an important trade, both export and import, with the eastern provinces of Persia and the southern portions of Afghanistan, by way of Shikarpoor and the outlet of the Bolan Pass.

5. The political troubles which soon after broke out, followed by the conquest of Sind and the settlement of the country, prevented the Government of the time from giving that attention to improvement of the means of communication for facilitating intercourse with other countries which the great importance of the subject appeared to demand.

6. But notwithstanding the peace and quiet which Sind has now so long enjoyed, and the improvements that have since taken place in so many ways, all that has yet been done in opening up and multiplying means of intercommunication is singularly inadequate to what is still required to meet the wants of the country.

7. The trade at present carried on between Kurrachee and the Punjab is mainly a transit trade, consisting of the productions of the latter country and the countries beyond the Indus ; but in the course of a very few years it has sprung from almost nothing to be a commerce of much importance, yearly increasing in value, and its present condition is hardly a fair index of what may be looked for with direct uninterrupted railway communication from the seaboard to the Punjab.

8. The present trade, such as it is, has been developed under considerable difficulties, for the short line of railway from Kurrachee to Kotree is of little value under present circumstances, and it seems questionable whether its point of contact with the Indus has been judiciously chosen, while the experience we have had of the Indus Flotilla seems to show that, owing to the difficulties and dangers of the Indus river navigation, mere water communication by the Indus is utterly inadequate for the existing trade, and powerless to call forth the natural resources of Upper Sind, which without railway communication seem likely to remain undeveloped.

9. The fertility of this part of Sind is unquestionable, and it would be contrary to our experience of the effects of railways in every part of the world where railways exist not to believe that a valuable local traffic would rapidly grow up through this and the other parts of the country as soon as they are tapped by a line of railway passing through the whole of the districts.

10. The Chamber considers it a point of the greatest importance that in any system of railways in Sind, or for connecting

Sind with the Punjab by a continuous line, provision should be made by a branch line to the mouth of the Bolan Pass to receive the traffic which arrives by that route from Beloochistan, Eastern Persia, and the south-western portions of Afghanistan.

11. There are prospects of a commerce between these countries and Western India and Sind that only require safe, certain, and speedy means of communication to develope to an extent to which the trade at present existing affords no adequate idea.

12. From the fine province of Khorassan alone we might in a short time expect to receive a large supply of cotton equal if not superior to any description grown at the present moment in India.

13. The cotton of this province in ordinary circumstances has such difficulty in finding a market, owing to the want of roads and means of transit, that the portion exported only finds an outlet in Russia, to which country it is shipped from the ports on the Caspian, and little or no pains whatever are bestowed on the cultivation.

14. Nevertheless, the scarcity of the raw material for the demands of England during the American War and the enormous rise in the price of the article caused a large importation, under great difficulties of transit, from Persia, including the cotton referred to, into Bombay by way of the Persian Gulf, so that a trade in this article by this route alone, which did not exist in 1860, was valued in 1865 at a sum little short of seventy lacs of rupees.

15. A very common sample of Khorassan cotton, which found its way to England during the period of the Great Exhibition of 1862, when shown to the Manchester Chamber of Commerce, caused the Chairman of that body to convey an intimation to H. M.'s Secretary of Legation in Persia, that if he could assist in procuring the transmission of such cotton to England he would be doing a great service, and this opinion of the cotton has been borne out by the opinions of Bombay merchants acquainted with the article.

16. Cotton, as well as the valuable wool, silk, and other articles the produce of Khorassan and Southern Afghanistan, would find an outlet to their best markets Kurrachee and Bombay, by way of Herat, Quetta, and the Bolan Pass; and with railway communication of the character above indicated, there can be no doubt a regular trade with Central Asia of great value would rapidly spring up.

17. Regarding railway communication between Bombay and Delhi from some point on the B. B. & C. I. Railway in Guzerat, this Chamber is of opinion that there is hardly any part of India of more importance in a commercial point of view, and no part of India for which so little has been done to create means of inter-communication between one province and another where none at present exist, or for connecting leading centres of trade with the seaboard.

18. At the present moment we are no better off as regards means of transit between Guzerat, Rajpootana, and the North of India than we were a century ago.

19. Though trading relations have long subsisted between Bombay and these provinces, recent experience compels the Chamber to state that the trade has been decaying instead of improving.

20. The stationary character of the existing means of communication, which continues what it has always been, tedious, dangerous, and expensive, has caused merchants to take advantage of the great improvements effected in the means of transit on the other side of India, and to deal with Calcutta, when in other circumstances they would have preferred Bombay.

21. For good evidence on this point I have the honour respectfully to direct the attention of His Excellency the Governor in Council to a Minute, appended to this letter, of a Conference held at the Chamber with some of the principal native merchants and bankers in Bombay connected with Rajpootana and Northern India.

22. These gentlemen, though resident in Bombay, are all natives of the countries mentioned, thoroughly conversant with all branches of trade connected with them, familiar with their trading wants and the best means of supplying them.

23. They were unanimous and enthusiastic in the view they took of the advantages to be derived from a line of railway that would connect Bombay with Delhi, skirting some parts of Rajpootana, and passing through others.

24. The Minute faithfully represents as far as it goes the substance of the views expressed by the native gentlemen present at the meeting, but it conveys no adequate idea of the strong opinions, to which they gave fervid expression, as to the benefits which they believed a line of railway from Guzerat would confer upon the States of Rajpootana and Northern India generally, no less than on the particular districts through which it would pass.

25. The States of Rajpootana have always been valuable customers to Bombay for the principal articles of import, such as the

various descriptions of piece goods and metals from England and silk from China; but trade has been prosecuted under such disadvantages in respect to means of transit that it is not surprising it should begin to fall off, and that the dealers should betake themselves to the Calcutta market, solely on the grounds of the saving they are thereby enabled to effect in time, and in the cost of transmission to the centres of business in the interior.

26. Under these circumstances it is not to be wondered at, though much to be regretted, that Rajpootana, while abounding in produce such as cotton, wool, opium, grain, salt, ghee, indigo, and other articles which Bombay is eager to receive, yet exports almost nothing.

27. Cotton to a small extent found its way from Rajpootana to the Home market under the pressure of high prices, but this staple, as well as the other valuable articles of produce mentioned, would be regularly exported at a profit with convenient means of communication by railway.

28. It is interesting to notice the evidence the Minute contains of the desire of the Rajpootana merchants and dealers to maintain their connection with Bombay even when their interests in some cases through recent changes would seem to point to Calcutta as a market from which they might supply their wants, not better nor probably so well, but certainly with a saving on the price of the goods at the marts in the interior owing to cheaper transit.

29. Bombay is geographically as near to Delhi and the leading centres of Northern India as any other port on the seaboard; its commercial relations with Rajpootana and parts of Northern India are intimate and of long standing; it affords facilities and advantages as a market whether for exports or imports superior to any other; and it appears to this Chamber an incumbent duty on the part of the Government of India to see that the connection does not suffer by delaying its sanction to a line of railway so indispensable for opening up and extending the commerce of such an important part of India.

30. Regarding the course the line should take for connecting Delhi with Guzerat the Chamber offers no opinion.

31. It will be observed that the native merchants attach great importance to any line that may be made touching at Pali, which is at present a great centre of trade from which goods are despatched to all parts of Rajpootana and the North of India.

32. But there are weighty considerations of another character that point to the route along the Myhe valley to Neemuch mapped

in the preliminary surveys of the Engineers of the Bombay, Baroda, and Central India Railway, as that which Government on a view of all the circumstances may find it necessary to sanction.

33. When a railway is once opened there may be changes in the channels through which both present local and through traffic in Rajpootana pass, but the trade of the country generally will be certain to increase and expand on all sides.

34. As to the possibility of the interests of the two proposed lines of railway clashing, the Chamber is of opinion that any fears entertained on this point must vanish on a deliberate consideration of the purposes which the proposed lines are expected to serve.

35. The only point indeed where they can possibly come in contact is, as observed by the native merchants, in reference to Punjab traffic, where, on connecting Bombay with Delhi, it may happen the two lines might, to a trifling extent compete for the traffic offering from Lahore and Umritsur, but the competition would be trifling, and otherwise it would tend to develope farther traffic, and thus serve the interests of both lines.

36. In all other respects it would not be easy to conceive two lines of railway more necessary to India and at the same time so independent of each other.

37. The Indus valley line is urgently needed to meet the growing wants of Sind itself, the increasing trade with Central Asia, and the transit requirements for the agricultural products of the Punjab, which of late have so remarkably been developed.

38. The Rajpootana line is no less urgently required for the convenience of an import trade of great value that has long existed, which suffers from the difficulties of existing means of Inland transit, and which with railway communication may, on the evidence of those who are thoroughly conversant with the trade and the habits of the people, be expected to expand to an indefinite extent.

39. In addition to all this, the Rajpootana Railway will have the effect of calling into existence an export trade, in some of the most valuable articles of Indian produce, between Bombay and other places in British territory with districts of country in the western parts of Central and Northern India, with which we have at present no such trading relations.

40. It is not within the province of the Chamber to consider the Military and Political reasons that may be urged in favour of both lines of railway, though these are probably of more importance than any set forth in this letter.

41. But the Chamber in conclusion hopes, that on the commercial grounds herein laid before His Excellency the Governor in Council, together with those other and higher considerations which affect so closely the well-being of the State, the Government of India may be led to favour the simultaneous construction, without loss of time, of two lines of railway so well calculated to confer the greatest benefits on the commerce and the population of so large and important a portion of India. I have the honour to be, Sir, your most obedient servant,

(Signed) JAMES TAYLOR,
Secretary.

MINUTE OF A CONFERENCE held at the office of the Bombay Chamber of Commerce, at the end of October last, with certain native merchants and bankers of Bombay, connected with Rajpootana and Northern India, for the purpose of hearing their opinions on the subject of a proposed line of railway to connect Bombay *via* Guzerat and Rajpootana with Delhi, and to receive information regarding the trade of these countries, in so far as they were able to afford it from their own knowledge and experience.

Present—

GUNESHDASS KEESNAJEE.	Shroffs and Merchants.
SHREERAM DOLUTRAM.	
DEWCURN RAMBEELASS.	
SUMUTROY RAMBUX.	
SAGURMULL SURDARMULL.	
KUMUNLEN SURDARMULL.	
KEESONDASS POOMUNCHUND.	Brokers.
GODURMULL GORKRAM.	

The native gentlemen present, in answer to the various questions addressed to them regarding the nature of the business they transacted in Bombay; their length of residence; the districts of country for which they purchased goods; the manner in which they despatched the goods they purchased as compared with the mode of transit adopted some years ago; the length of time occupied in transit by different routes; the effect of recent changes in the mode of transmitting goods to the interior on the trade which exists between Bombay, Rajpootana, and North India,

the probable effects of railway communication connecting Bombay and Delhi, *ain* Guzerat and Rajpootana, the probabilities as to an export trade between the north of India, Rajpootana, and Bombay; the nature of the products likely to be exported, and various other questions of a similar character, gave evidence to the following effect:—

They all described themselves as shroffs and merchants, connected with firms scattered through Rajpootana, Delhi, Umritsur, and other parts of Northern India. They receive orders from merchants in the countries mentioned for all descriptions of piece goods and metals imported into Bombay from England and silk from China, &c., &c.

Goods purchased for Delhi and places north of it are usually despatched now *via* Kurrachee, thence per steamer to Mooltan, and afterwards by railway to Lahore and Umritsur.

Goods despatched from Bombay by this route take on the average two months to reach Umritsur.

The Sind route now used has been very generally employed for more than three years.

Formerly all goods for the North were despatched from Bombay to Gogo by boat, thence from Gogo to Pali, Ramghur, Umritsur, &c., by carts, camels, and pack bullocks.

Goods forwarded by this route took from three to three-and-a-half and four months to reach their ultimate destination.

The change to the Sind route has been made partly from the saving effected in the cost of transmission, but also on the ground of the saving effected in the time taken in transit.

The cost of the old route overland with camels, &c., was about double that of the route now generally used.

A railway through Rajpootana from Guzerat to Delhi would do incalculable good; it would open up districts of country with which Bombay at present has no trade, and increase a trade that has been falling off as regards dealing with Bombay.

It would be of the utmost importance that any line of railway made should touch at Pali, that place being a great centre of trade from which goods are forwarded to all parts of Rajpootana and the north of India.

Much grain could be exported from the Rajpootana districts, as well as salt, which could be sent in great quantities from districts near Nusseerabad. Salt is not at present exported owing to the heavy expenses connected with transit. Wool, cotton, opium, ghee, &c., might also be largely exported, in which articles there is at present very little trade, for the same reason.

Trade would increase in the proportion from an anna to a rupee if they had railway communication.

Labour is at present very cheap in these districts, rarely exceeding two annas per day for a man, commonly an anna and an anna and half. Women only receive one anna.

The country is rich in many parts, and only needs enterprise to open it up, and means of communication to transport the produce.

The Native Governments do nothing to improve the country, but things would be quite different if they had English Government.

Owing to improvement of transit on the other side of India by railway, piece goods, all kinds of metals, sandal wood, pepper, cardamoms, dried cocoa-nuts, China raw silk, and other things are sent from Bombay to Calcutta, and from Calcutta to Delhi by railway, thence to Bowannee, from which centre the goods are distributed in the districts surrounding. Bowannee is only about 800 miles from Bombay, but the goods sent to it *via* Calcutta make a journey of nearly two thousand miles.

The route from Bombay *via* Calcutta takes only a month, the old route *via* Pali three months and more, and the cost of transit double.

A bale of piece goods from Bombay *via* Calcutta to Bowannee can be sent for Rupees 22 (twenty-two), whereas by the old Pali route it takes three months to reach its destination, and the cost is Rs. 40 (forty).

There is a great deal of local trade between Pali and Bowannee and other northern parts, which would be enormously increased by railway communication. This trade consists largely in dyed and printed piece goods, mollasses, ghee, sugar, roots for dying purposes, &c.

They believe that a line of railway from Baroda to Delhi, and another from Kurrachee to Mooltan, would not compete with each other in any way except perhaps in a very slight degree; as regards some parts of the Punjab they say "both lines are quite necessary to open the country."

The inconveniences of all existing routes in Rajpootana are very serious from the loss of property by robberies, which are very numerous, and at times the country is unsafe for life.

The transit duties through various States are very heavy, and amount to about rupees six per package between Guzerat and Bowanee.

(Signed) JAMES TAYLOR,

Secretary.

Bombay Chamber of Commerce, November 1866.

No. 2091 OF 1866.

RAILWAY DEPARTMENT.

To the SECRETARY TO THE CHAMBER OF COMMERCE, Bombay.

SIR,—I am directed by His Excellency the Governor in Council to forward for your information the accompanying printed papers on the subject of the extension of Railway communication between the Upper Provinces of the Bengal Presidency and the Presidency of Bombay.

2. These papers are to be considered as "not for publication."* I have the honour to be, Sir, your most obedient servant,

W. KENDALL, Colonel R. E.,
Acting Secretary to Government.

Bombay Castle, 16th October 1866.

MINUTE BY HIS EXCELLENCY THE GOVERNOR, DATED AUG. 1866.

COMPARISON OF INDUS VALLEY AND RAJPOOTANA LINES OF RAILWAY.

All papers which have not yet been forwarded regarding the Indus valley and Baroda to Neemuch surveys should be sent to the Government of India in reply to this letter.

2. I would lose no time in expressing the extreme satisfaction of this Government at the light in which the Government of India seems prepared to view this subject.

3. (I.) On the first question put to us by the Government of India as to the general advisability of constructing the lines of Railway between Kotree and Mooltan, and between Guzerat and Delhi, I can only repeat the opinion to which in various forms and on different occasions I have so often given expression, that it would be difficult to find in all India two works of greater or more pressing importance in every point of view, especially with regard to military, political, and commercial objects; to which, too, I would add my conviction that any avoidable delay in their construction would be a great misfortune, and might prove to be a serious national calamity.

* These papers having been subsequently published in the *Gazette of India* the Order of the Bombay Government is reprinted for the information of members.—Secretary, Bombay Chamber of Commerce.

4. (II.) On the second question on which our opinion is asked—viz., as to the respective merits of the two lines—I would observe that many of the advantages and disadvantages of each line are well summed up in Colonel Dickens' memorandum, but I would briefly and generally state them thus :—

5. The Indus Valley line is the natural line, the shortest by many hundred miles, the easiest and most direct line between the sea and at least 20 millions of people, British subjects, or their allies, or immediate neighbours and constant customers.

6. This is more than half the population of all France (thirty-five millions), or of Austria before she lost Italy (thirty-six millions), more than the whole population of England and Wales, or of Prussia, or of Spain (respectively eighteen, seventeen, and fifteen millions), double the population of all Turkey in Europe (ten millions), and more than four times the population of Belgium (four and half a millions) ; it is more than the whole population black and white, of the United States in 1840 (seventeen and half millions).

7. These twenty millions of people are mostly (for India) of very spirited races, intelligent and enterprising, but docile and at present fairly peaceable, industrious agriculturists and persevering traders; not naked savages, but people who go fully clothed, and are quite as well inclined as any in India, and as most in Europe, to make or spend money.

8. The Indus Valley line touches the sea at the port of Kurrachee. This port presents at all seasons of the year a roadstead for the largest ships quite as commodious as any other open roadstead in British India. The holding ground of the anchorage is good, the tides regular, and the direction of the coast line such as to present little difficulty in getting to sea. The land-locked inner harbour is even now easily accessible at all seasons to all ships under 1,200 tons. I may be allowed to add that, in the opinion of all experienced Harbour Engineers who have ever seen it, the harbour is easily capable of such certain improvement at moderate cost as shall safely accommodate vessels of 2,000 tons and upwards.

9. In 22 years, from 1843-44 the trade of this end of the line, *i. e.*, the sea-borne trade of Sind, rose steadily from £122,000 to 4¾ millions sterling in value, and the exports from almost nothing at all (about £1,000 value) to little short of 3 millions, and there is every prospect of a further steady increase.

10. Some of the staples are of great national importance. 20 years ago no cotton nor sheep's wool was exported from Sind.

In 1864-65 nearly 25 millions of pounds of cotton were exported, of which 4/5ths were exported direct to Europe, and 18 millions of pounds of sheep's wool. Both cotton and wool were principally the produce of the Punjaub, or of countries beyond it.

11. There is no other possible sea terminus for several hundred miles east or west of Kurrachee; there is therefore no room for question as to the best position for the southern or ocean terminus of this line.

12. Northward the desert below Bhawulpoor comes within sixty miles of the skirts of the mountain ranges which separate the Indus Valley from Affghanistan; there is, therefore, in this direction, not much room for doubt as to the course of the railway, which must run between these two natural barriers.

13. When it is considered that 450 miles of railway from Kotree to Mooltan along an alluvial country, without a hill a hundred feet high throughout its whole course, would connect twenty millions of cultivating and trading people with their nearest seaport, it seems to me almost superfluous to attempt to prove that such a railway must pay. I will however briefly notice the objections which have been started to it.

14. 1*st*.—It is said there are other routes, *e. g.*, *vid* Rajpootana, and also *vid* the Valley of the Ganges.

15. But the former, the Rajpootana route, must always be longer and more expensive for even those parts of the Punjaub which lie nearest to Goozerat and Bombay.

16. No line *vid* Rajpootana can ever compete with the Indus Valley line for the traffic between the sea at Kurrachee and the Punjab Proper, Central Asia, and Affghanistan, as regards cheapness of construction or working.

17. By the Ganges Valley line, the length from the Punjnab to the sea is as 5 to 3, compared with the distance by the Indus line; it is about the difference of a line from London to Edinburgh, as compared with a line from Paris to Venice.*

* The distances as the crow flies may be taken as—

Ferozepoor to sea at mouths of Indus	620 miles
Do. do. do. of Ganges	1,020 „
London to Edinburgh	325 „
Paris to Venice	525 „

18. Again, it has been said there will be little local traffic on the Indus Valley line, and that without local traffic no railway can pay.

19. This might have been said with some truth of both ends of the line—the 220 miles from Lahore to Mooltan, and the 100 miles from Kotree to Kurrachee.

20. But over both these portions, the least promising portions of the whole line, the railway is already made.

21. For the 450 miles between Mooltan and Kotree, I know few parts of India where the prospects of local traffic are more certain and promising.

22. The line will traverse one uniform plain of the richest alluvial soil, unbroken by anything save large rivers and canals.

23. I have been repeatedly over the greater part (about 300 miles) of it, and can certify from personal observation that there will not be 20 miles of the whole distance, as laid out by Mr. Brunton, which is not capable of the richest cultivation. The greater portion is actually now under cultivation, and habitually bearing grain crops such as are never to be seen in any other part of India I have visited.

24. Even at the present moment there is not on the Great Indian Peninsula Railway, within the Bombay territory, nor on the first hundred miles of the Guzerat line, any continuous ten miles of country naturally so fertile, nor at the present time so productive as at least two-thirds of this whole 450 miles distance between Kotree and Mooltan, and there are not five miles of hopelessly barren land on the whole 450 miles.

25. The only reason I could ever discover for the extraordinary delusion regarding the present prospects of local traffic on this line, is the circumstance that on a perfectly open, unenclosed, flat, alluvial, roadless country the traffic and population is never visibly concentrated in a manner to strike the attention of the superficial observer. When a man can walk, as he can in Bhawulpoor or Sind, direct as the crow flies from his own house to any point five, ten, twenty or even fifty milies distant, untempted by any made road, unimpeded by hedgerow or hillock, ravine or mountain ranges, or anything but an irrigation canal, or a thicket of jungle trees, the ordinary traveller may be excused for under-estimating the population, productiveness, or commerce, as compared with most parts of India, where the natural features of the country force traffic and population to concentrate themselves on particular lines and spots.

26. But the concentration, which the features of the country do not compel or even invite, will be insured by the necessities of railway travelling, and unless there be some unexplained cause of which I have never heard a hint, I cannot doubt but that the richer country will yield the better return of traffic. Every one can see that the proportion of fertile as compared with barren land is two or three times as great in the irrigated portions of

Sind as in any part of the Deccan or Kandeish, and exceeds even the proportion in fertile Guzerat; that every kind of grain is more luxuriant and more productive; that the cattle are larger, the people better fed and better clothed than in the Deccan; and why the local railway traffic should not be at least as remunerative as in the best paying parts of the Deccan or Kandeish is, I confess, more than I can understand.

27. But it is also urged that the competition of the river transit will interfere with the through traffic of the railway. To this I answer that it has not done so in Bengal,* nor in any other country in which railways have been made parallel to navigable rivers, or even sea coasts. And the reason is obvious enough; if the river navigation is really good, and the traffic great, as on the Ganges, the quick and certain transit which a railway only can supply, is an essential adjunct to the river transit; if on the other hand the river transit is imperfect, or ill developed, as on the Indus, the railway transit becomes an essential substitute.

28. In Sind, the superior advantages of the railway, as compared with the river, for quick and certain transit will be peculiarly marked, for the river in itself affords but tedious and hazardous navigation at best, and except at a few points is difficult of access from the land. It is probably on the whole not naturally superior as a naviga-

* Captain Stewart in his late Inspection Report on the navigation of the Ganges (I quote from the "Englishman" newspaper), gives the following facts as illustrating the action of the East India Railway on the Ganges Boat traffic:—

"The Collector of Mirzapore estimates the reduction in the country boat trade since the opening of the Railway at one-half; the Collector of Benares considers that the trade has been reduced to one-fourth of what it was before; the Collector of Ghazeepore is of opinion that it will be ultimately altogether supplanted by the railway; Messrs. Smyth and Co. of Dinagepore estimate the reduction at fifty per cent. or more. The Ghatmanjee of Allahabad says the boats arriving by the Jumna now are to those arriving formerly as four to fifteen; and the same is the case with boats coming from the North-West by the Ganges; and it was the general opinion of the most influential Mahajuns of stations bordering on the river that nearly all goods would soon be carried by rail or steamer."

On this the "Englishman" observes:—

"It happens, however, that all this evidence is derived from that part of the river which is strictly alternative to the Railway. It excludes all the great feeders to the Ganges from the north, on which, we believe, the boat traffic has increased; and we know that a greater number of boats belonging to the Upper Provinces, and manned by up-country men, are now engaged in the transport of produce in Lower, Eastern, and North-Eastern Bengal. The immense development of our jute trade alone must have produced employment for many of the missing boats between the jute-producing districts and Kooshteah and Calcutta. Moreover, there is no evidence whatever of any such general diminution in the rates of freight charged by native boats, or of any such want of employment among boatmen, as must have been produced were the falling off general to the extent Captain Stewart's Report would seem to indicate."

I have little doubt it will be the same on the Indus, where the railway and river lines are strictly alternative. The Railway will take largely from present Boat traffic; but the whole traffic will greatly increase, and the boats driven from that part of the river by the Railway will find ample employment on the rivers where the Railway does not directly compete with boats. We know that the East India single line has long been choked with more traffic than it can carry.

ble river to the Ganges; and its capabilities are certainly less developed.* If the Ganges is not found to absorb all the traffic, and leave none to the railway, why should the Indus?

29. I have not discussed the question whether the line should take the right or left bank of the Indus between its two terminal points. I myself consider the balance of advantages to be in favour of the left bank line. But if the right bank be considered to have stronger claims, by all means let the railway be on the right bank. All I would strongly urge is that the Punjab and the Sind Railways should be united by a line of rail on the one bank or the other, and that as speedily as possible.

30. Nor will I discuss whether the northern section from Mooltan to Sukkur, or the southern from Sukkur to Kotree, should be first taken in hand. The former avoids the worst part of the river; the latter affords the more cheap and natural mode of execution—namely, from the sea, inland. I would urge that both sections be taken in hand simultaneously, attention being first directed to those points which, like the great river and canal crossings, will take longest to complete.

31. The present state of Bhawulpoor affords peculiar facilities for making a railway along the left bank through that territory. The country has fallen into such a state of anarchy that the British Government has been compelled to assume charge of its administration. The formation of a railway would at once afford ample employment to all the labouring class, and be the best guarantee for the present improvement and future quiet of the State.

32. Nor will I speak of engineering difficulties. A survey has been already completed, and the experience of our Sind Canal Department and of Lower Bengal are sufficient to prove to demonstration that there are no difficulties at all comparable to those with which the Bengal Railways have had no contend. I can speak from personal observation that the worst part of the line indicated by Mr. Brunton's Survey is not beset with any greater natural difficulties than the more favourable portions of the Lower Bengal lines.

33. As for the question how far the Indus Valley line is likely to pay the guaranteed interest, I would observe that I hardly

know an important line in Europe or Asia of which it has not been proved to the entire satisfaction of its opponents before it was commenced that it was impossible for the line to pay the ordinary rate of interest. But when the line is well chosen, when the natural difficulties are not extraordinary, and the execution is fairly honest, it is, I believe, almost invariably found that a railway pays wherever there is, as in the present case, a large population and a considerable natural traffic; and it is now, I believe, become an accepted fact, that wherever a great line of inland commerce exists, such as is more than sufficient to fill a train daily each way, there is profitable room for a railway.

34. I think such general estimates of the probable results of a new and improved mode of carriage are more likely to be correct than elaborate calculations of how much or how little of the existing traffic is likely to take to the rail, instead of going by boat or camel. The result always sets at naught such minute calculations, for the simple reason that the creation of new traffic consequent on the opening of a railway is apt far to exceed the diversion of ancient traffic wherever a railway competes with pack animals or other carriage. It has been so to a very marked extent on all the Indian Railways with which I am acquainted. Before the Great Indian Peninsula Railway from Bombay to Poona was commenced, it was supposed to have been proved that the Railway could never pay 3½ per cent. The Railway has cost fully twice as much as was then expected. It now returns more than 6½ per cent., and yet the cart traffic from the Deccan to Panwell is not diminished.

35. A comparison has been instituted, to the disadvantage of the Indus Valley line, between it and the Great Trunk of Canada. I have no personal knowledge of the latter line, but I would ask what possible parallel can be drawn between the Canadian line, 1,174 miles long, and the Indus line, 776 miles; Canada with a population of 2½ millions scattered along the shore of a vast inland navigation of rivers and lakes, and the Punjab, Sind, Cashmere, and Affghanistan with a population eight times as numerous and far more concentrated; the Canadian line having for 300 miles of its best paying portion a competing railway (the Great Western of Canada) running nearly parallel at a distance of from 20 to 40 miles? The Canadian great trunk line ends at Quebec, a port closed by ice for some months in each year, while during the winter sleighs, and during the summer the river and lake navigation, can always compete in cheapness with the Canadian Railway. There can obviously be little comparison between

two cases so evidently dissimilar as any Indian and this Canadian line.

36. A better comparison would have been between the Punjaub and the United States; the white population of which in 1850 was not greater than that of the basin of the Indus and its tributaries is now, while the Punjab population is far more concentrated. Let us imagine this population placed from 500 to 1,000 miles inland in America, and let us reflect what an American would say to any doubt as to whether a railway should be made between such a population and the sea.

37. So far regarding the commercial aspect of the Indus Valley line. As regards its military and political importance it is sufficient to say that it connects all the garrisons of the Punjab and of its northern and western frontier with their most natural sea base at Kurrachee.

38. I cannot doubt that sooner or later, and I fervently trust at no distant period, a line will be made from Lahore to Peshawur, and it will then be possible with the help of an Indus Valley line to send in a few days troops and material from the sea to the Punjab frontier, or *vice versâ*, instead of their occupying whole months as they must do at present.

39. It is quite impossible to exaggerate the enormous importance of this additional facility, whether in view to operation on the sea coast, or of the Punjub frontier and Northern India. It seems to me mere waste of time to dwell further on this point.

40. I will add but a few words on the peculiar merits of the Rajpootana line from Guzerat to Delhi.

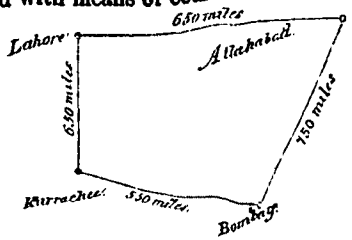
41. It will be, as the map shows, the shortest, best, and most natural outlet to the sea for the whole Valley of the Ganges and its tributaries nearly as far south as Cawnpore, and for the whole of Rajpootana, and for a great part of the Valley of the Jumna, the Chumbul, and their tributaries.

42. It is difficult to speak with accuracy as to the population of these provinces, but I feel assured that I am much within the mark in stating that there are at least from 20 to 25 millions of people, industrious cultivators and traders, who would find by this line readier and cheaper access to the sea than by any other line either down the Valley of the Indus or of the Granges.

43. The relative position of the vast provinces which are the residence of this population will be seen from a glance at the annexed sketch map marked **A**, showing the general direction of our existing railways in North-Western India; and I would beg special attention to the comparison of the length of these railways

and of the width of the intervals between them with the two dark horizontal lines on which the direct distances of some principal towns from London and Paris have been marked to scale.

44. Let us consider how far the great quadrilateral formed by lines joining Lahore, Allahabad, Bombay, and Kurrachee is provided with means of communication.



The sides of the quadrilateral are given in the annexed diagram, in round numbers and in direct distance, and the included area cannot be less than 4,00,000 square miles.

45. Perhaps a better idea of its magnitude may be obtained from the other sketch map marked **B**, on which France and Germany, Great Britain and Ireland are projected to scale within the space of North-Western India, of which I am speaking.

46. Let us consider this vast space, compared with which Germany and France seem so small and compact. How is it furnished with means of transit and intercommunication?

47. Throughout this space, a line drawn north and south from the Jumna north of Agra to the sea, say 600 or 700 miles or about twice the distance from London to Edinburgh, will, till it reaches the Baroda Railway, close to the sea coast, touch no railway nor navigable river nor canal, nor even a common cart road 100 miles in length. A line drawn east and west say from Kurrachee to the Allahabad and Jubbulpoor Road, will, in like manner, in a course of more than 900 miles, or about as far as from London to Rome, cross neither railway nor navigable canal, and only one cart road, that from Agra to Mhow. Even that is still unbridged and unmetalled, incomplete, and not available for continuous cart traffic though it has been more or less under construction for at least 30 years.

48. The whole of this vast space, so full of large cities, fertile districts, and promising wastes, is in fact furnished with no better appliances for facilitating transit than the natural surface of the country affords, and has afforded for centuries past.

49. Here and there no doubt a few short lines of made road may be found, but I believe I speak within compass when I say that in no part of this immense territory could a cart find (except

on the incomplete Agra and Mhow line above noticed) 100 miles of ordinary bridged and metalled road traversable by wheeled carriages for the whole year round, nor 200 continuous miles of made road, however imperfect, in any part of the area.

50. I conclude it is quite superfluous to attempt argument to prove that this is a state of things which ought to be remedied, if possible. At any rate, if any one says that this state of destitution of all means of transit and intercommunication throughout a great, fertile, populous, and most improveable territory is a state which is desirable, and ought to be continued, I confess myself puzzled to know where and how to begin to argue with him.

51. I will assume, then, that it is admitted that it is very desirable to have the best and cheapest modes of transit provided; that, if we can get them provided in this territory, the thing obtained will be good in itself, and even worthy of some expenditure of public money to secure it.

52. If it were proposed to connect Delhi and Baroda by good made cart roads traversable at all times of the year, it might be said that the projects were too large and too costly to be undertaken, except when the treasury was overflowing, but no one would question for a moment the immense value of two such roads to the Empire.

53. Nor would the most niggardly Government that India has ever seen refuse to accept such a road, and to keep it in repair, if by any stroke of an enchanter's wand the cart road could be suddenly brought into existence.

54. There are now two companies ready to undertake the construction of a railway between Delhi to Guzerat with their own money, provided the usual interest of 5 per cent. be guaranteed by Government.

55. As to the prospects of such a line paying, it is difficult to give statistics of transit in a province where roads, canals, and railways are as yet practically unknown; but when it is considered that there is no part of Europe, with the exception of England, Holland, and Belgium, and the very best parts of France, Germany and Italy, so rich and productive, or where the people are so well inclined for commerce or agriculture, it seems scarcely necessary to argue on the probability of their gladly availing themselves of the vast facilities for traffic which a railway affords, and that a line traversing such a province, with Delhi at one terminus, and Guzerat and the seaboard of Western India at the other, must be at least as remunerative as any long line in India.

56. The surveys already executed by Mr. Foy have shown that there are absolutely no engineering difficulties—no ascent with a gradient steeper than 1 in 100—no river so large as the Mhyee, where the Railway now crosses it near Baroda.

57. On the military and political importance of this line it seems nearly superfluous to dilate to any one who knows any thing of military or political India. It is the natural line to the nearest sea base of our garrisons in the great Sirhind and Rajpootana Divisions; and its immense importance both as a direct and as a flanking communication will be apparent whether we contemplate operations to meet invasion on the western seaboard, or on the west, north-west, and northern frontiers of India, or to suppress internal enemies in the Punjab, Northern India, the Gangetic Valley, the Deccan, or Rajpootana itself.

58. But distance and want of roads have so long practically almost excluded Rajpootana from the calculations of the agriculturist and trader of other provinces, and in a less degree from the speculations of the politician and soldier, that the results of railways through the country can only be inferred from what we see of results in other countries similarly situated, and any attempt to calculate from any present satistical basis can only mislead.

59. As an instance, however, of the extent to which we may reasonably expect the development of products which at present do not form objects of cultivation or of trade in these countries, I will take the one article of cotton. It is little more than four years since the Government of India went to great expense to collect and publish the satistics of cotton cultivation and trade in India; and of the handbooks then published two contained maps showing the locality and extent of cotton cultivation as then known, according to the latest information then in the possession either of Government or of the very well-informed gentlemen who drew up the handbooks, and who had at command all the information possessed by the Chambers of Commerce and other repositories of commercial information at the Presidency Towns.

60. In the Bombay map (Mr. Walter Cassel's Handbook) the Punjab is indicated as a country which produces no cotton. In the Bengal map (Mr. Medlicott's *Handbook*) the Punjab is coloured as a country which produces cotton, but which also imports it, and has, by implication little or none for export. In both maps Rajpootana is marked as a province which produces no cotton of commerce.

61. Yet from both provinces, under the pressure of high prices, cotton has been largely exported during the past four years, since the handbooks were written; from the Punjab, as before stated, to a very great amount (more than 11,000 tons in one year,) and from Rajpootana to an appreciable extent from districts as far north as Delhi.

62. The same sort of result which has been effected in this article of cotton under the pressure of high prices may, I need hardly observe, be repeated as regards all sorts of produce, by increased facilities of transit such as a railway affords.

63. The annexed sketch marked C shows the lines which have been more or less carefully examined and surveyed by the Engineers of the Bombay, Baroda and Central India Railway. As regards the extension to Neemuch I would observe that I think the balance of advantages is in favour of taking the branch from the west bank of the Mhyee; it will then run through more British territory, and though the distance from Neemuch to Bombay will be somewhat increased, the distance from Neemuch to Ahmedabad will be lessened.

64. (II.) As regards the 2nd point on which the Government of India desire our opinion, viz.—on the "respective merits" of the two lines, *i. e.*, the Indus Valley and Rajpootana lines—I must confess my inability to compare two things which have hardly any common term for comparison.

65. If a man had been asked 35 years ago, when railways were not in England, as to the respective merits of two lines—the one from Bristol *via* Birmingham, Liverpool, or Manchester, to Glasgow—the other from London *via* York, to Edinburgh, I imagine he would have said that as the lines would be generally from 50 to 100 miles apart, with, for a great portion of the distance, the mountain backbone of England between them, and as they would subserve different interests—commercial, agricultural, and political—comparison was almost impossible.

66. His difficulties would have been of the same kind, but much greater, if required to compare a line from Waterford to Belfast with one from Bristol to Glasgow. He would observe that besides being in different provinces, they were from 100 to 200 miles apart, with the Irish Sea between them.

67. Still more difficult would his task have been if required to compare the respective merits of a line from Falmouth to Norwich in England, with one from Nantes to Strasbourg in France, or a line from Ancona to Milan in Italy, with one from Frank-

fort in Germany to Pesth in Hungary, or the line from Gottenburgh to Stockholm in Sweden with the line from Berlin in Prussia to Warsaw in Poland. He would say, in each case that a great sea or vast ranges of mountains separated the two lines from each other, and rendered comparison impossible.

68. How then shall we compare our two proposed Indian lines, which must run from 300 to 400 miles apart from each other, as distant as any of the pairs of lines I have enumerated, with the Great Desert of India between them?

69. The Irish Sea, the English Channel, the Baltic, and the Adriatic are all traversed daily by multitudes of steamboats conveying thousands of passengers of every class, in a few hours and for a few shillings or pounds; and the Alps between Italy and Germany are no insuperable barrier to travellers. But the Great Desert which will ever separate the Indus Valley line from the Rajpootana line has not been traversed during the 30 years I have known it, by 20 European non-military travellers. It is at its narrowest portion several days' journey across for a strong man on a well-appointed beast of burden, and for several months of the year the passage is not to be attempted by the strongest man without much risk to health and even to life.

70. It has, I believe, been gravely argued that if the Indus Valley line be completed, and the East India Railway branch from Allahabad to join the Great Indian Peninsula Railway at Jubbulpoor be finished, these two lines will supersede all the principal objects of a line through Rajpootana.

71. It is difficult to show the weakness of such argument by any comparison drawn from Europe, simply because the areas in India are so vast, that any European parallel fails to afford any adequate idea of the Indian distances.

72. But if we bear in mind that the English Great Western Railway is about the same distance from any Piedmontese line as the Indus Valley line is from the Allahabad and Jubbulpoor branch, and that the English Channel and the Alps combined form a less formidable object to traffic than the Great Indian Desert, we can appreciate the force of an argument against the Rajpootana line, which is less responsible than that of a man who should object to a line being made from Nantes to Strasbourg, on the ground that there were already lines from London to Falmouth in England, and from Turin to Venice in Italy, either of which might serve the traffic between the west coast of France and the Rhine.

73. How shall we compare lines in countries so separated—countries entirely different in race, in language, in religion, and in their commercial and political position?

74. But why attempt any comparison? If Government had to find the capital, and if it could find no more than would suffice for one railway at a time, then some comparison or choice might be necessary or expedient; but this is not the case. Two different companies contend for the making of each line; and it is certain that both lines can and will be finished quicker if commenced simultaneously, than either will if priority of execution be conceded to it. For though the lines are not really rival lines, any more than an English line is a rival to any paralled line in France, there is some profitable traffic which may be secured by whichever line is first open, and which, joined to a natural emulation to be open first, will be sufficient to ensure every exertion to complete it being made by both lines, if they are both commenced simultaneously.

75. It is true Government will have to find the guaranteed interest till the lines are open—five lacs of rupees for every million sterling of capital spent; but what is the real burden of this liability?

1*st*.—It is not more than Government would gladly spend, if they had it, on common roads to connect the same points. 2½ lacs per annum to make a bridged turnpike road from Mooltan to Kotree, and a like sum between Delhi and Baroda, would be a very moderate assignment; and yet it would hardly finish the road in the time of our grandchildren. A like sum spent in guaranteed interest would finish 100 miles of railway per annum, and ensure the opening of both lines within less than 10 years.

2*nd*.—Meantime the outlay while in progress would swell the earnings of other guaranteed lines—the East Indian, the Bombay and Baroda, the Sind, and the Punjab lines; and when completed the new lines would greatly increase the resources of the old, without any addition to terminal expenses or cost of general direction and management.

3*rd*.—The outlay on a common road would be capital sunk, very usefully laid out, no doubt, but bringing no direct return; the outlay on guaranteed interest is a terminable charge, with some propect of entire repayment, and far greater indirect return than from any common road.

76. But it seems almost superfluous to adduce further argument

to prove that the real burden to the State of guaranteed interest on useful Railways is very small, compared with the advantages secured by the State in return, and that the same is true of any other form of State assistance or guarantee on well chosen lines of railway.

77. It is quite certain that the most rapaid railway expenditure on both lines consistent with a fairly honest outlay will not impose on the State a burden for guarnteed interest greater than can be easily borne in the present state of our finances. During the term of outlay on unfinished railways the Railway Companies are always paying in fresh capital, and in point of fact the real burden under the present system can hardly be said to commence till the railway is complete and no more capital can be paid in, so that up to that time the interest is virtually paid out of the fresh capital continually coming in, and so far from forming any real burden on the resources of the Imperial exchequer of India, the arrangement with the Railway Companies often affords a source of income very convenient to the Indian Chancellors of the Exchequer.

78. (III.) The above remarks will have to some extent rendered unnecessary any expression of opinion on the 3rd question asked by the Government of India, as to "the order in which the (two) lines should be carried out."

79. In the absence of any apparent reason for commencing one before the other, I would earnestly advocate the simultaneous commencement of both lines.

80. But I would say a few words on the peculiar risks attending reliance on any one line of trunk railway, especially a single line without an alternative line of communication.

81. Every line in India must for a considerable part of its course be exposed to risk of intentional injury, against which no system of watching can guard; and there cannot be a doubt that in any time of political danger efforts would be made to interrupt the communication.

82. I do not speak now of the large bridges and other similar works which would require much well directed labour to render them impassable, and where any such operations would be attended with much risk of discovery.

83. There are on every Indian line hundreds of miles of line where a train might be thrown off and the single lines rendered impassable for days by operations against which no ordinary vigilance could guard, and which it would take long to repair even were the working parties secure from hostile interruption, which cannot always be ensured.

84. Let us consider for a moment the paralysing effect of such an interruption at a time when reinforcements were passing between the sea coast and the Valley of the Ganges, or any part of Upper India.

85. There cannot be a doubt that the moral effect of even a few days' interruption of any line for which we had no alternative would be most disastrous, and that, occurring at periods like 1857-58, or during the Trent discussions with America, or the Umbeyla Pass operations—three times at least in the last ten years—the results might be such as we would gladly purchase immunity from at a price far higher than we shall have to pay for the alternative lines afforded by the projects now before us.

86. It must be recollected that no experience of the possibility of getting on, without such facilities as railways and electric telegraph afford, can give any measure of the danger and inconvenience of interruption after the communication is once established, and after the Government and people have got used to it.

87. (IV.) Lastly, our opinion is required as to "the terms which shall be offered for the construction of these lines."

88. I should answer, the lowest terms on which their construction within the shortest possible period can be insured.

89. My own opinion would be in favour of an extension of the present guarantee system, within such changes as experience has shown to be necessary to guard against waste and delay in construction.

90. This might be easily effected by allowing no work on the easier portions of the line till the working designs and specifications had been completed and approved by Government for the whole line, and contracts had been secured for its execution within a defined period.

91. This need not entail any delay if the Railway Company were allowed to commence operations at once on the great works, such as ghauts or great river crossings, the completion of which would occupy the longest time, and without which the line could not be opened.

92. But if any better plan than the present guarantee system can be devised without risk of delay, I would not object to it. All I would urge is the extreme danger and costliness of delay.

93. As to the companies to which the work should be entrusted, I would observe that experience seems to show that any length of railway less than from 300 to 500 miles hardly affords scope for

the action of a separate company; while more than 1,000 miles would seem in India to exceed the powers of adequate control by any one company's administration.

94. Bearing these limits in mind, and supposing that any line from Lahore to Peshawur would be entrusted to the Punjab Company, and would fully occupy them for some years to come, I would give the Indus Valley line from Kotree to Mooltan to the Sind Railway, and would commence it simultaneously from both ends, and in both directions north and south from Roree.

95. But I know nothing to prevent the line from Roree to Mooltan being given to the Punjaub Railway, if that course would expedite the completion of the whole line from Mooltan to Kotree.

96. The line from Guzerat to Delhi seems naturally to belong to the Bombay, Baroda, and Central India Railway line, and was from the first, I believe, a part of their prospectus.

97. I have only one more point to submit, and that is, that we should ask the Government of India to permit the surveys of both lines to proceed as speedily as possible.

98. It will be in the recollection of the Hon'ble Board that we had entrusted to the Sind Railway Company the task of making the necessary surveys up to Mooltan, with an express stipulation that such permission did not imply any claim to the ultimate concession of a right to construct the line, and on similar terms we allowed the Bombay, Baroda, and Central India Railway Company to make the surveys to Neemuch, from the Baroda line.

99. The survey parties were however recalled, and the surveys suspended, in consequence of peremptory and reiterated orders from the Government of India and Secretary of State.

100. Of course, if no railway is ever to be made, a survey is mere waste of time and money. But supposing that a railway is likely to be made within the next ten or even twenty years, this suspension of survey operations seems to me a serious misfortune.

101. On neither line has the best exact course for a railway been clearly ascertained, nor can the question be placed beyond the reach of doubt without careful surveys, which, at the most moderate computation, would occupy one or perhaps two seasons, and which in particular spots may occupy even a longer period.

102. Costly experience on every one of our lines shows us how much we have lost in money mispent, and often in lines misdirected, owing to the want of sufficient preliminary survey; and it is possible, nay extremely probable, that the railways now in question may, in a time of political and military pressure, be hurriedly

conceded, and made on other than the best lines, owing to the want of sufficient preliminary surveys.

103. Apart, then, from any question of immediate execution, I would most strongly urge an active prosecution of survey operations, for without them it would be impossible to set at rest, or to decide satisfactorily, whether a line from Mooltan to Hydrabad should go by the right or left bank of the Indus, whether it should skirt the hills, or keep close to the river, and how near in the latter case it should keep to Roree.

104. Again, with regard to the Delhi and Baroda line, careful surveys alone can set at rest whether the line should leave the Bombay and Ahmedabad line, east or west of the Mhyee, or whether it should cross the Jumna at Delhi, or Agra, or some intermediate point.

105. It is certain that delay will neither in any way diminish the cost or facilitate the execution of the extensive surveys required to determine these and other similar points; on the contrary, the surveys can be now made at less cost and more completely than will be possible a year or two hence; for the two companies referred to have trained and experienced surveyors available, who are well acquainted with the languages and usages of the country, and who will execute the work required more completely and successfully than could possibly be expected from fresh and inexperienced hands.

106. For these reasons I would most strongly urge the active prosecution of the surveys whether the railways are to be proximately undertaken or not.

H. B. E. FRERE.

Poona, August 1866.

MINUTE BY HIS EXCELLENCY SIR R. NAPIER, K.C.B., COMMANDER-IN-CHIEF, DATED 18th AUGUST 1866.

I most fully and entirely concur in the views expressed by His Excellency the Governor, in the comprehensive, and, may I venture to say, able minute on the question of railway communication between the North-West Frontier and Bombay and Kurrachee.

2. His Excellency's long and intimate acquaintance with the countries which lie between Bombay, Mooltan, and the North-West Provinces give the highest authority to his arguments on the social and commercial aspects of the question.

3. That both lines, the Indus Valley line and the Rajpootana line, should be commenced without loss of time I cannot for a moment doubt; and the too hastily condemned guarantee system is the best and most convenient mode of raising the capital for the purpose.

4. It is necessary only to refer to the progress made in railway communication under the guarantee system, and under the substitutes proposed for it, to be satisfied that capital will not come freely forward except under a guarantee.

5. There can be no difficulty now in taking such precautions as will ensure greater economy and more expedition than have hitherto been obtained.

6. But admitting all that has been or can be said against the guarantee system as adopted, let us consider for a moment how much we gained by even a single year's imperfect railway communication between the North-West and Calcutta in 1858—how infinitely greater the military and political gain than any money we could have saved by slower and more economical works.

7. This is not the place for discussing the military reasons why the lines should be commenced at once. I will submit my opinion on that part of the question in a separate minute; but I join most earnestly with His Excellency the Governor in urging that no time should be lost in deciding that both the railways shall be made, and in prosecuting the necessary surveys and investigations.

8. We have now time, as far as we know, to ensure the best lines, and the most economical bargain; but if we wait for the moment of pressure, which, judging from all past experience, will come sooner or later, we shall then have to adopt the expedients of the day, without either the efficiency or economy that are now in our power.

R. NAPIER.

MINUTE BY THE HONOURABLE B. H. ELLIS, DATED 24TH AUGUST 1866.

I concur generally in the views expressed in His Excellency the President's Minute, which is so full and exhaustive that I need add but little.

2. Colonel Dickens' note appears to me to show ample grounds for permitting without delay the construction of both the lines in question. I do not understand how any one can doubt the absolute necessity in a political and military point of view of lines to connect Kurrachee with Lahore on the one hand, and Bombay with Delhi on the other. I regret much that the preliminary surveys of these lines were peremptorily stopped; but I trust that enough information has been collected to form the basis of a properly developed scheme for the early prosecution of work in both directions.

3. Had Government proposed to expend its own money, it might have been a question which line should be undertaken first; but as the money can no doubt be raised by two independent companies, there is no ground for postponing either because the other is to be sanctioned, and the sooner both lines are carried out the better will it be both politically and financially.

4. I have no hesitation therefore in recording my opinion that both works should be prosecuted. The next question is, to what companies the construction should be entrusted.

5. In regard to the Indus Valley, I am of opinion that the Sind Company should be allowed the extension either to Mooltan, or at any rate to Bhawulpoor. The Punjab Railway Company may be profitably employed by Government in an extension towards Peshawur, and the length of the lines under this Company, if restricted to Bhawulpoor, will be nearer that of the Sind line than if this Company were to carry its line into the heart of Sind. The operations, too, would naturally begin from the seaward; and the worst part of the river, judging from the record of recent accidents, is just above Kotree, and this section should first be made.

6. But I would strongly advocate the eventual fusion of the Sind and Punjaub Railway Companies: their interests are identical, the length of line not more than one great company could manage, and it would be more economically worked with a single staff of officials, and one controlling establishment.

7. The line to be constructed is situated between two lines already guaranteed, and is simply the connecting link between these two lines, without any independent traffic of its own. I do not see therefore how we can adopt any other mode of construction than that sanctioned for the original Sind and Punjaub lines. The Railway Companies should be permitted to draw money on guarantee, but some modifications in regard to exchange and other minor details might be made with advantage when a guarantee is given for this additional capital.

8. In regard to the line to Delhi, the section to Neemuch has already been surveyed by the Bombay, Baroda, and Central India Railway Company, and there seems no doubt but that this Company should have the line so far; but it is chiefly as a military and political line that this section of the railway would be useful and without the proceeds of the through traffic it would be hardly remunerative. There seem to be reasons, too, for giving the line to Delhi throughout to the Bombay, Baroda, and Central India Railway, on the score of the great extent of railway already under the management of the other line

9. And as there would be no prospect of raising money for this line except on guarantee, it would be vain to expect any other terms to be accepted. It is essentially an Imperial line and one on which a guarantee would be appropriate.

10. If any other mode of construction be thought of I should like to see this line selected to ascertain whether a system similar to that adopted in France might not advantageously be adopted in this country. The funds might be raised by Government, and the works constructed by Government Engineers. When completed the line would be handed over to a company to work. In this case the Baroda Railway Company would doubtless agree to working the line. They would profit largely by the carriage of material while the line is under construction, and by the increased traffic on their own line after the opening of the extension.

B. H. ELLIS.

MINUTE BY THE HONORABLE C. J. ERSKINE, DATED 27TH AUGUST 1866.

His Excellency the Governor has gone so fully into this subject that I should be sorry to detain the papers. The conclusions to which he has been led seem to me to be incontrovertible.

2. That it is desirable to execute as speedily as possible the Indus Valley line of railway, and also the Rajpootana line, can surely not admit of question. The great importance of both works for purposes of military communication is obvious. Their importance for social and commercial purposes is not less apparent, or less remarkable. No one I think is likely to doubt the propriety of taking measures for their immediate construction, unless he doubts whether the lines, or either of them, will be speedily remunerative.

3. On this point I agree with His Excellency the Governor, that attempts to estimate the amount of traffic that will flow along a proposed line of railway, from minute statistics of the pre-existing traffic in the same direction, are generally extremly deceptive, and that it is more prudent to rely upon the generally ascertained fact that the trade of great inland territories, populous, productive, and capable of indefinite development, will always, where no special obstacles intervene, be well able to pay a fair price for the best line of communication with the nearest port on the seaboard. Along the course of the lines now referred to no extraordinary obstacles exist; while great tracts abound in the neighbourhood of both of them whence even the present surplus produce cannot effectively

find its way out, while the needful foreign supplies cannot effectively find their way in. There, as elsewhere, is seen how greatly all efforts to improve the productiveness of a province must depend upon the means of distributing its productions.

4. As regards the respective merits of the two lines in like manner, I agree with His Excellency the Governor. They cannot in any proper sense be regarded as competing or rival lines. With the exception of a few neutral districts near the commercial watershed between the two systems of communication— that viâ Mooltan to Kurrachee, and that viâ Rajpootana to Bombay—these lines will drain off the traffic, and supply the wants of different states and countries, peopled by different races.

5. I would certainly therefore answer the question as to the order in which they should be made, by urging that "both should be made first," and that both should, if possible, be commenced simultaneously at either end. The advantages of working from the sea inland are no doubt extremely great; and the lateral attraction of a railway (and so its profits) as it penetrates into the interior are rapidly multiplied. But in connection with these lines there are reasons why the independent agencies that already exist at either extremity of both of them should be encouraged to commence active operations as soon as they can be induced to do so.

6. As to the terms to be offered, the question seems almost to have settled itself in these instances. At each end of either line is a guaranteed company willing to aid in completing the work on the terms of a further guarantee. The profits upon the several portions already guaranteed will depend materially upon the conditions on which they can be brought into relations with each other. It would be impossible to allow parenthetical sections of great arterial lines to fall under a management with interests foreign to those which exist at the extremities, and absolved from all State control. Indeed, throughout all great monopoly lines of this description, some degree of State control at the outset seems to be essential to a due protection of the interests of the general public. The right to exercise that control could hardly, I suppose, be acquired more cheaply than by the grant of a fair guarantee. Improvements in the present system are called for in sundry matters of detail. But these do not seem to be the lines in connection with which any attempt should at present be made to abandon the system altogether.

7. I confess that I have no desire to encourage the attempt to construct any portion of these lines by a directly Governmental agency.

8. The proposal of His Excellency the Governor that the surveys on both lines should be pushed on immediately is of the greatest importance, and will, I trust, be adopted without delay.

C. J. ERSKINE.

No. 235 of 1866.

BOMBAY CHAMBER OF COMMERCE, 26TH NOV. 1866.

COLONEL W. KENDALL,

Acting Secretary to Government, Railway Department, Bombay.

SIR,—Referring to my letter of the 15th instant on the subject of proposed lines of railway in the Indus Valley to connect Kurrachee and the Punjab, and from Guzerat through Rajpootana to connect Bombay with Delhi—I have the honour to forward herewith 12 printed copies of the same for the use of Government.

I am directed to take this opportunity of acknowledging with the best thanks of the Committee of the Chamber your letter of 16th ultimo handing certain printed papers on the subject of the above-mentioned lines of railway, which have been read with much interest. I note that the papers are to be considered as "not for publication."—I have the honor to be, Sir, your most obedient Servant,

JAMES TAYLOR, Secretary.

No. 412 of 1867.

RAILWAY DEPARTMENT.

TO THE SECRETARY CHAMBER OF COMMERCE, BOMBAY.

SIR,—In continuation of my letter No. 2,346, dated 28th November 1866, I am directed by His Excellency the Governor in Council to forward for the information of the Chamber copy of a despatch from Her Majesty's Secretary of State for India, dated 16th January No. 1 of 1867, relative to the proposed railway up the Valley of the Indus, and the extension of the B. B. & C. I. Railway towards Delhi.—I have the honor to be, Sir, your most obedient servant,

W. KENDALL, Colonel R.E.,

Secretary to Government.

Bombay Castle, 28th February 1867.

No. 1.

RAILWAY INDIA OFFICE, LONDON, 16TH JANUARY 1867.

To His Excellency the Honorable the GOVERNOR in COUNCIL, Bombay.

SIR,—I have received your Excellency's despatch of the 28th November 1866, No. 58, transmitting papers showing the opinions of the Chambers of Commerce at Bombay and Kurrachee on the proposed railway up the Valley of the Indus and on the suggested extension of the Bombay, Baroda, and Central India Railway towards Delhi.

2. These communications will be considered in connection with others on the same subjects.—I have the honor to be, &c.

(Signed) CRANBORNE.

APPENDIX B.

COMPULSORY REGISTRATION OF PARTNERSHIPS.

To the SECRETARY TO THE GOVERNMENT OF BOMBAY, JUDICIAL DEPARTMENT.

Dated 28th February 1867, No. 28.

I am directed by the Committee of Management of the Chamber of Commerce to forward, herewith, for the information of His Excellency the Governor in Council, copy of a memorial addressed to the Chamber by a number of the principal native merchants and bankers in Bombay, praying the Chamber to bring to the notice of Government "the desirableness of a legislative enactment for the compulsory registration of partnerships" and of deeds of trusts or gifts.

2. When handing up to Government in March last year the minutes of various members of the Chamber on the Bill to Amend the Law of Partnership in India, which was at that time before the Governor General's Council, I had the honour in my letter dated 23rd idem, to direct the attention of Government to the necessity for a registration of partnerships and of commanditarian loans that might be made under its provisions; but the Bill was passed into a law before the suggestions referred to could have been brought to the notice of the members of the Legislative Council of India.

3. Since the Bill referred to became law, the question of a compulsory registration of partnerships has again been under the consideration of the Chamber, and it was recently resolved that Government should be addressed on the subject, with a view to a Bill being introduced into the Legislative Council of India, the provisions of which should be framed in such a manner as would provide for accomplishing the objects above mentioned.

4. The numerous insolvencies of native firms which have taken place in Bombay within the last ten months have revealed a very scandalous state of things in respect to the manner in which native co-partneries are commonly carried on.

5. It has been proved when investigating the facts connected with some of the insolvencies under Act XXVIII. of 1865, that native merchants have been carrying on business under several different names, and have thus obtained credit and advances from English merchants and bankers that would never have been accorded to them had the actual state of affairs regarding the constitution of these native firms been known.

6. A common mode of procedure appears to be somewhat as follows:—Four or five natives form themselves into as many separate firms with distinct and separate names, but really consisting of the same persons; they go for advances to English merchants and bankers, each taking a certain proportion; and in this way much credit has been obtained on a basis so exceedingly small that serious loss has been incurred by English houses, where, if the real circumstances connected with such firms had been known or could have been in any way obtained, credit would not have been given at all.

7. Cases are known to the Chamber where men have regularly bought and sold for native firms, signed the names of the firms, and were always supposed to be members of the firms; yet when insolvency afterwards ensued, they denied they were partners, and were thus enabled to get rid of their liability, because it was almost impossible to prove their statements to be untrue.

8. The question of a compulsory registration and publication of deeds of trust and gifts referred to in the memorial of the native merchants and bankers is hardly second in importance to that of partnerships.

9. The experience of members of this Chamber fully corroborates all that is set forth in the native merchants' memorial regarding the manner in which property has been conveyed to near relatives, or given away nominally as gifts, but really intended to be held for the benefit of the families of men who have become bankrupt, and who defraud their creditors by thus making away with their property without the slightest compunction, when they can contrive to do so without bringing themselves within the grasp of the law.

10. For the protection of the mercantile and banking interests of this country against these serious evils, this Chamber is of opinion that the most effectual remedy will be found in a carefully considered scheme of compulsory registration of partnerships and deeds of trust or gifts.

11. A custom already prevails amongst European merchants in India of voluntarily announcing by advertisement in the *Government Gazette* and the local newspapers all changes, whether as

regards the retirement of existing partners or the admission of new ones, and by their voluntarily supplying to the compilers of the annual calendars the names of the various partners of which their firms are respectively composed. No such custom prevails amongst the native merchants; on the contrary, the greatest secrecy is observed by most of them; and it is next to impossible for European merchants and bankers to find out the truth about native firms as regards position and liability of ostensible partners when they have an interest, or suppose they have, in concealment.

12 Machinery for carrying out a scheme of partnership registration could be readily attached to the present Registration Office. There might be two registers alphabetically arranged,—one of firms and another of the individual members composing firms, with the necessary particulars as to age, place of residence, and such other details as might be considered requisite for facilitating reference, and otherwise affording information regarding the constitution of firms which those having business relations with a body of partners have a right to know.

13. The names of persons who sign for firms, or hold powers of attorney authorizing them to act for firms, should also be included in the registers.

14. Compulsory registration would be indispensable to the efficiency of the scheme, and registration should be enforced under certain penalties.

15. The character of the penalties is a matter of detail that there need be little difficulty in arranging; but on this point the Chamber, though fully concurring in the principles of the memorial from the native merchants, does not commit itself to the approval of the details as to the manner in which they propose to carry out the objects of the same.

16. In bringing this subject before Government, I am directed by the Committee of Management of the Chamber respectfully to express a hope that His Excellency the Governor in Council may take it into his early consideration and press the same on the attention of the Government of India with a view to legislation at the earliest possible date. Any information or assistance Government may require in dealing with a question so important to the mercantile and banking interests of this country, which it may be in the power of this Chamber to afford, shall be cordially and cheerfully rendered.

I have the honour to be, &c.,

(Signed) JAMES TAYLOR,
Secretary.

From VERJEEVUNDASS MADOWDASS, and thirty others.

To the SECRETARY, Chamber of Commerce, Bombay.

14th November 1866.

We, the undersigned native bankers, merchants, and others, beg to intimate our cordial approval of the opinion expressed by the Chamber of Commerce in its last annual Report as to the desirableness of legislative enactment for the compulsory registration of partnerships. We are of opinion that such an enactment is urgently required, and that if the wishes of the Chamber are complied with by Government, such compliance will not only benefit the entire commercial community, but will effect considerable moral good. We beg leave to suggest that the non-registration of partnerships (giving the name, residence, previous occupation, &c., of each partner in full), and of all changes made from time to time by the retirement of old or introduction of new partners, should be made punishable in the same way as the non-registration at present of Joint Stock Companies; and we would further recommend that no partnership firm should be allowed to appear plaintiffs-at-law for claims which may have originated at any period prior to their partnership being registered.

2. Another enactment which is, in our opinion, urgently required in the interests of the commercial community, for obtaining which we solicit the influence and exertions of the Chamber, is a law for the publication of deeds of trust or gifts. Instances have lately come to light of persons of influence and wealth having privately placed considerable portions of their property or possessions in trust, or given the same away nominally as gifts to their relations, but really to be held for the benefit of themselves and their families in case of their being unfortunate in their speculations. The effects of such proceedings are most serious, and unless some measures are taken to prevent a recurrence of them, the entire system of commercial credit is endangered—a result which could not but be disastrous to the interests of trade and to the commerce of Bombay. We would point out for the consideration of your Chamber that, in the cases referred to, it was found out only on the bankruptcy of the parties that the property supposed to stand in the name of bankrupts, and to be available for the payment of their debts, had been made away with, and unless some legislative enactment be passed, such as that now asked for, it will create distrust even in the richest and most upright traders, because no one will know whether or not their properties have been transferred over to others. We would further point out that if debtors are in this

way enabled to obtain the sanction of law for trading on the credit of possessing wealth, which had previously been placed beyond the reach of creditors, there is no saying to what extent the example just brought to light will be followed hereafter. The evil we are noticing is clearly one of those cases in which the English law would teach the people of this country a convenient mode of practising dishonesty, to which they had been strangers previously. We therefore suggest that when any one individual sets apart in trust or makes a gift out of his property for the benefit of himself, his wife, family, relatives or friends, such deed of trust or gift shall not be valid unless described and notified in the *Government Gazette*. We would also recommend that the proposed Act be made retrospective and require the publication of all deeds of trusts and gifts executed twelve months prior to the passing of the Act.

3. Begging of the Chamber to take the above matter into consideration, with the view of pressing the same upon the attention of Government.

MINUTE by the HONORABLE MR. ERSKINE, subscribed to by the HONORABLE MR. ELLIS; dated 20th April 1867.

As I was not sure that I rightly apprehended the wishes of the Chamber of Commerce on the subject of a compulsory registration of partnerships, I communicated with the Honorable Mr. Hunter, who was good enough to meet me one evening in company with Mr. Grant, Mr. Astley, Mr. Campbell, Mr. Taylor, and Mr. S. Shapoorjee.

I ascertained that the allusion in paragraph 2 of the Chamber's letter was not intended to suggest any re-opening of the question relative to the registration of loans *en commandite*.

I ascertained also that there was no desire to press the suggestion made in paragraphs 8 to 10 of the letter.

The one point in regard to which the gentlemen present appeared to be unanimous was the expediency of obtaining, if possible, an enactment for the compulsory registration and publication of the names of all persons entering into partnerships—the process to be repeated on each occasion of a change in the *personnel* of any partnership.

I was assured that no member of the Chamber had dissented from this recommendation—that the feeling in favour of it was also very strong among the native merchants, and that the Chamber of Commerce in Calcutta had signified its concurrence in the proposal, and its desire to give every support to it.

The practice of publishing (by advertisement) the names of all the partners of every European firm, and all changes in the constitution of such firms, is already generally followed in Bombay.

With reference to paragraph 12 of the Chamber's letter, I believe that such registrations might be arranged, very simply and without extra cost, in the office of the Registrar of Joint Stock Companies. The attention of the Registrar General has already, it appears, been drawn to the subject, in connection with registrations of money bonds, by Marwarrees, without the production either of a deed of partnership or of a power of attorney.

As it appears that the desire for such a registration of partnerships is widely felt among mercantile men, both European and native, I would recommend the subject to the consideration of the Government of India.

As many partnerships exist only for a limited period, or for particular ventures, it would be necessary to make special provision for that class of cases.

It would be necessary also to provide carefully for the rights, in partnerships, of females, minors, &c.

The most difficult question, it seems to me, is that which relates to the rights of members of undivided Hindu families in mercantile and banking firms. But this likewise is rather a matter of detail.

We might express a hope that the subject will receive the early attention of the Government of India.

MINUTE by the RIGHT HONORABLE THE GOVERNOR; dated the 20th May 1867.

The Minute of Mr. Erskine omits any reference to the registration of deeds of gift and trusts. There is more difficulty in dealing with this question, as, for any legislation in order to secure the object the memorialists have in view, it would be difficult to avoid including such *bona fide* gifts and conveyance in trust as might fairly and properly be made to provide for near relatives or carrying out family arrangements, and thus unnecessarily exposing the private affairs of individuals. The attention of the Government of India, however, may be invited to the subject.

From the ACTING UNDER-SECRETARY TO THE GOVERNMENT OF BOMBAY, to the SECRETARY TO THE GOVERNMENT OF INDIA, HOME DEPARTMENT, Simla; dated 27th May 1867, No. 1663.

Adverting to the correspondence ending with your letter, No. 727, dated 10th May 1866, I am directed by the Right Honorable

the Governor in Council to forward, for submission to the Government of India, the accompanying copy of a letter, No. 28, dated 28th February last, from the Secretary to the Bombay Chamber of Commerce, with enclosure, being transcript of a memorial addressed to the Chamber by a number of the principal native merchants and bankers in Bombay, pointing out "the desirableness of a legislative enactment for the compulsory registration of partnerships and of deeds of trusts or gifts."

2. Copies of the minutes recorded by the Honorable Members of this Government on the subject are also herewith forwarded.

No. 29 of 1867.

BOMBAY, 11TH MARCH 1867.

H. W. J. WOOD, Esq.,

Secretary to Bengal Chamber of Commerce, Calcutta.

DEAR SIR,—I have the pleasure to hand you herewith by direction of the Committee of Management of this Chamber for the information of your Chamber, copy of a memorial from certain native merchants and bankers of Bombay praying the Chamber to move Government for an enactment to make a registration of partnerships and deeds of trust or gifts compulsory under penalties—and also of a letter from the Chamber to the Bombay Government drawing its attention to the memorial, expressing concurrence in its principle, and earnestly urging Government to bring the subject to the notice of the Government of India in order that the whole question may be deliberately considered with a view to legislation upon it as early as may be practicable.

This Chamber is deeply impressed with the necessity of some measure of this kind for the protection of the interests of merchants and bankers, and the Committee have desired me to express a hope that, in the event of their views being concurred in by the Bengal Chamber, you will give your valuable aid to the movement by addressing the Government of India in support of the action that has been taken.

I remain, dear Sir, your faithfully,

(Signed) JAMES TAYLOR,

Secretary.

No. 30 of 1867.

(Similar letter to the Secretary to the Madras Chamber of Commerce.)

From H. W. J. Wood, Esq., Secretary to the Bengal Chamber of Commerce, to E. C. Bayley, Esq., Secretary to the Government of India; dated 23rd March 1867.

The Committee of the Chamber of Commerce have received from the Bombay Chamber copy of a representation to the Government of Bombay as to the expediency of a legislative enactment for the compulsory registration of partnerships and of deeds of trust, and gifts.

2. The Chamber states that "the numerous insolvencies of native firms, which have taken place in Bombay within the last ten months, have revealed a very scandalous state of things in respect to the manner in which native co-partneries are commonly carried on. It has been proved, when investigating the facts connected with some of the insolvencies under Act XXVIII. of 1865, that native merchants have been carrying on business under several different names, and have thus obtained credit and advances from English merchants and bankers what would never have been accorded to them had the actual state of affairs regarding the constitution of these native firms been known. Cases were known to the Chamber where men have regularly bought and sold for native firms, signed the names of the firms, and were always supposed to be members of the firms; yet, when insolvency afterwards ensued, they denied they were partners, and were thus enabled to get rid of their liability, because it was almost impossible to prove their statements to be untrue."

3. The extent of this practice is so great, and its consequences are so serious, that many native bankers, merchants, and others have recognized the necessity of appealing to the Chamber for the adoption of such stringent measures as will effectually put a stop to the system of fraud from which they, in common with the European merchants, have so severely suffered.

4. They are of opinion that the compulsory registration of partnerships will be attended with great benefit to the entire commercial community, and effect considerable moral good; and, while they urge that legal provision should be made in this important respect, they also strongly advocate the necessity for bringing deeds of trust and gift within the operation of the law.

5. They declare that "instances have lately come to light of persons of influence and wealth having privately placed considerable portions of their property or possessions in trust, or given the same away nominally as gifts to their relatives, but really to be held for the benefit of themselves and their families in case of their being unfortunate in their speculations." They assert that "the effects of such proceedings are most serious, and, unless some measures are taken to prevent a recurrence of them, the entire system of commercial credit is endangered—a result which could not but be disastrous to the interests of trade and to the commerce of Bombay."

No. 1828.

Home Dept.—*(Legislative.)*

From E. C. BAYLEY, Esq.,

Secretary to the Government of India,

To N. DANIELL, Esq.,

Acting Under-Secretary to the Government of Bombay.

SIMLA, 1st July 1867.

SIR,—I am directed to acknowledge the receipt of your letter No. 1663, dated the 27th May last, forwarding, with copies of Minutes recorded by the Members of the Bombay Government, copy of a Communication from the Secretary to the Bombay Chamber of Commerce, and of a Memorial addressed to the Chamber, pointing out the desirableness of a legislative enactment for the compulsory Registration of Partnerships, &c.

2. In reply, I am directed to state that the papers in question have been transferred to the Legislative Branch of this Department, in which the subject is under consideration for disposal.—I have the honour to be, Sir, your most obedient Servant,

(Signed) E. C. BAYLEY,

Secretary to the Government of India.

No. 2093 of 1867.

JUDICIAL DEPARTMENT.

Copy forwarded to the Secretary to the Chamber of Commerce for information.

N. DANIELL,
Acting Under-Secretary to Government.

Bombay Castle, 13th July 1867.

No. 2429 of 1867.

JUDICIAL DEPARTMENT.

BOMBAY CASTLE, 19th August 1867.

SIR,—Adverting to the correspondence ending with Government Endorsement No. 2093, of 13th ultimo, I am directed by the Right Hon'ble the Government in Council to forward to you herewith copy of a letter from the Secretary to the Government of India, No. 3039, dated the 3rd instant, with accompaniments, on the question of the compulsory registration of partnerships, and to request that you will be so good as to favour this Government, for submission to the Government of India, with the opinion of the Chamber of Commerce on the points noted in Mr. Whitley Stoke's letter to the Secretary to the Bengal Chamber of Commerce.—I have the honour to be, Sir, your most obedient servant,

N. DANIELL,
Acting Under-Secretary to Government.

To the SECRETARY to the Chamber of Commerce.

No. 3039.

HOME DEPARTMENT.

FROM E. C. BAYLEY, Esq.,
Secretary to the Government of India.

To the Hon'ble M. J. SHAW STEWART,
Acting Chief Secretary to Government, Bombay.

SIMLA, 3rd August 1867.

SIR,—I am directed to forward the accompanying copy of a letter addressed from the Legislative Branch of this Department

to the Bengal Chamber of Commerce, on the question of the compulsory registration of partnerships, and to request that, with the permission of his Excelleney the Governor in Council, the Bombay Chamber of Commerce may be asked to favour the Government of India with an expression of opinion on the points noted therein.—I have the honour to be, &c.,

(Signed) E. C. BAYLEY,
Secretary to the Government of India.

No. 3037.

From the ASST. SECY. TO THE GOVERNMENT OF INDIA,
HOME DEPT. (LEGISLATIVE BRANCH).

To the SECRETARY TO THE BENGAL CHAMBER OF COMMERCE.

SIMLA, 31st July 1867.

SIR,—I am directed to acknowledge the receipt of your letter of the 23rd March 1867, with its enclosure, and in reply, to make the following remarks:—

2. The question of the expediency of an enactment for the compulsory registration of partnerships has long been before the Legislative Branch of the Government of India, and was much discussed when the Bill, which became Act XV. of 1866, was referred to a Select Committee. The feeling of the Council was then against any such enactment. The general reason was thought to have weight, that a measure narrowing and limiting the proof of partnership would be rather in favour of fraud than against it. Again, no such requirement existing in England, it was felt to be desirable that the Commercial Legislation of England and of India should be as far as possible identical. Further difficulties appeared to be that a registration of merely ostensible partners would be comparatively useless, and, on the other hand, that under the system of undivided family property which prevails in India, registration of all persons interested in a partnership would sometimes, in the case of Hindu firms, be practically impossible. Lastly, it was understood that the Indian Law Commissioners were about to make certain proposals for defining and amending the law relating to private partnerships, and it was clearly inexpedient to proceed with any measure that might conflict with their recommendations.

3. The compulsory registration of trust-deeds and gifts, to which the letter of the Chamber incidentally refers, was brought by Sir Arthur Buller before the late Legislative Council, but was found to involve so many grave political difficulties, that the measure proposed by the learned Judge was dropped, and it seems inexpedient to revive it.

4. The arguments adduced and the state of things disclosed in the letter under reply, and in those noted in the margin, do, however, lead the Governor General in Council to think that a measure requiring the registration of partnerships might now be introduced to the Council with a reasonable prospect of its ultimate adoption, provided it were confined to purely commercial partnerships, and if its operation were limited, at all events in the first instance, to the Presideney towns. Similar requirements, it may be remarked, are in force in France, Germany, and in several of the States forming the American Union, and the proposed measure would probably contain a clause resembling the French provision that neglect of enrolment nullifies the instrument of partnership as between the partners themselvs, though they cannot make use of such defect as against third parties.

5. Before however, the Bill is framed, it would be desirable to ascertain more distinctly the views of your Chamber on the following points :—

6. The Bombay Chamber of Commerce, and the Native Bankers who moved that Chamber to communicate with Government, apparently wish the registration to be enforced by pecuniary penalties, such as those inflicted on public companies and their directors by sections 26, 33, &c., of the Indian Companies' Act X. of 1866. It is obviously inexpedient to create new offences except where it is absolutely necessary to do so, and the Governor General in Council would wish to know whether, in your opinion, it is desirable to apply such penal provisions to private firms, or whether a clause framed in the spirit of the French provision abovementioned would be sufficient for all practical purposes. The effect of such a clause would, of course, be that one unregistered partner would lose his right to bind, or to be indemnified by the other, to share in the profits, or to obtain an accconnt or dissolution. The partners collectively would also be unable to enforce against third persons the contracts entered into by the firm.

7. It is not clear from the letters above referred to what details regarding the constitution of the firms, besides the names, ages, and residences of the members, it is in the opinion of the Chamber desirable to register. I am requested to indicate, as

matters on which persons dealing with a firm may reasonably desire to be informed, the style of the firm, its place or places of business, the date of the commencement, and the proposed duration of the partnership, whether or not it may be determined earlier by notice the capital to be employed in the business, the shares in which such capital has been or is to be contributed, provisions which partnership deeds often contain as to future advances, interest on capital, allowances to partners, and settlement of shares of partners dying during the term. The Governor General in Council would be glad to learn whether, in the view of the Chamber, all of these particulars, or any of them, should be entered in the Register.

8. The Governor General in Council assumes that it would be the wish of the Chamber that, in framing the Act, care should be taken to prevent the possibility of its affecting the position of persons who become partners by construction of law for the purpose of sharing in the liabilities of insolvent firms. Any such application of the new measure would obviously contribute rather to the encouragement than to the prevention of fraud.—I have the honor to be, Sir, your most obedient servant,

(Signed) WHITLEY STOKES,
Assist. Secy. to the Government of India,
(Legislative Branch).

APPENDIX C.

WORKING OF THE COTTON FRAUDS' ACT.

No. 81 of 1867.

From the Acting Inspector-in-Chief, Cotton Department, Bombay,

To the Secretary Chamber of Commerce, Bombay.

Bombay, 23rd Feb. 1867.

Sir,—As you are aware, the officers of this Department are only appointed to carry out the provisions of Act IX. of 1863. They are, however, anxious by all lawful means to assist in protecting the cotton trade of the Presidency, a very serious injury to which, I believe, is done by the systematic false marking in the presses of bales—*i. e.*, affixing marks denoting a superior variety of cotton to that which is absolutely contained in the bales.

2. I have the honour to request you will have the goodness to favour me with an expression of the opinion of the Chamber as to whether the members consider it would be for the benefit of the cotton trade that the officers of this Department should proceed against persons offending as above shown under section 487 of the Penal Code, Act XLV. of 1860.—I have the honour to be, Sir, your most obedient Servant,

C. W. Walker, Lieut. Col.,
Acting Inspector-in-Chief Cotton Department.

No. 27 of 1867.

To Lieut.-Col. C. W. Walker, Acting Inspector-in-Chief, Cotton Department, Bombay.

Sir,—I have to acknowledge the receipt of your letter of 23rd ultimo requesting the opinion of the Chamber as to the expediency of the officers of your Department proceeding against persons "affixing marks denoting a superior variety of cotton to that which is absolutely contained in the bales."

Your letter has been duly submitted to the Committee of the Chamber for their opinion, and, in reply, I am directed to inform you that they do not consider the question of marks, as the cotton trade is carried on, a matter of the least consequence.

In selling and buying cotton marks are not considered, and in these circumstances it is a matter of comparative indifference what marks may be put on bales.—I have the honour to be, &c.,

JAMES TAYLOR, Secretary.

Bombay Chamber of Commerce, 7th March 1867.

No. 1801 OF 1867.

REVENUE DEPARTMENT,

BOMBAY CASTLE, 11th May 1867.

To the SECRETARY TO THE CHAMBER OF COMMERCE, BOMBAY.

SIR,—I am directed by His Excellency the Governor in Council to forward herewith copies of the documents noted in the margin, and to request the attention of the Chamber to the points adverted to in paras. 3 and 7 of the Government Resolution.—I have the honour to be, Sir, your most obedient servant,

Letter from the Acting Inspector-in-Chief Cotton Department, No. 155, dated 13th April 1867, with accompaniments.
Government Resolution No. 1799, dated 11th May 1867.

H. E. JACOMB,

Under-Secretary to Government.

No. 1799.

REVENUE DEPARTMENT.

BOMBAY CASTLE, 11th May 1867.

Letter from the ACTING INSPECTOR-IN-CHIEF, Cotton Department, No. 155, dated 13th April 1867, with accompaniments—Submitting the Annual Report of his Department for the past year (1866).

RESOLUTION.—The Financial condition of the fund required the first consideration. During the year under report 9,39,679½ bales were exported from the Presidency. A sum of Rupees

1,83,858 was realized from fees and other sources. The expenditure amounted to Rupees 2,18,052, thus showing a deficit on the year's operations of Rupees 34,194.

2. A Cotton Commission having been recently appointed for the Central Provinces and the Berars, and an application for a pecuniary contribution towards defraying the cost of this newly established Department having been received, it becomes necessary to consider how the requisite funds can be obtained to meet this extra expenditure and to provide for the existing deficit. It is clear that as a large quantity of the cotton on which fees are levied in Bombay is produced in those Provinces, the application for pecuniary aid is reasonable. It is equally clear that the commerce of Bombay is as much concerned in the improvement of the staple grown in the Central Provinces and the Berars as in that produced in any parts of this Presidency. The Chief Commissioner, Mr. Temple, recently applied for assistance to the extent of Rupees 70,000 per annum, and this sum is probably not much in excess of what the Provinces in question are equitably entitled to. Including the current year's deficit, it will thus, in round numbers, be necessary to provide by extra taxation and reduction for a lac of Rupees.

3. The Right Honorable the Governor in Council will request the opinion of the Chamber of Commerce as to whether the present fees might not be raised from three to four annas per bale. This measure would give an increase of a sum of Rupees 60,000 per annum.

4. The appointment of an Inspector for the Sattara, Poona, and Ahmednuggur Collectorates should be abolished, as proposed by Colonel Walker (vide paragraph 109), on the present incumbent, Mr. Manley, being provided for elsewhere; and the services of a sub-inspector on Rupees 300 per mensem alone retained for employment at Barsee and at the stations on the Sholapoor line of Railway; a saving of Rupees 10,000 per annum will be thus effected. As there is little prospect of cotton being produced to any considerable extent in the principal division of Poona and in the Ahmednuggur and Sattara Collectorates, there will be no occasion to divert the attention of the inspectors of other Collectorates to them with a view to the improvement of the cultivation.

5. The Inspector-in-Chief will be requested to report whether the appointment of an inspector at Karwar might not be abolished. Hardly any cotton is grown in either the Rutnagherry or Canara Collectorates, and it would seem sufficient to appoint sub-inspec-

tors at Compta, Karwar, and Vingorla. Further reductions can probably be made amongst the grades of sub-inspectors employed up-country. The main safeguard against adulteration and fraudulent packing must be exercised at the ports of export and at the presses.

6. With the above remarks on the financial condition of the fund, His Excellency the Governor in Council will proceed to notice such portions of the Chief Inspector's report as call for special remark. Commencing with the presidency town, there appears a want of organization and method in the way the duties of the Department are carried on. Bombay should be made more the headquarters of the Inspector-in-Chief than it is at present, especially during the export season. For police purposes the main strength of the Department should be located at the Presidency. The three inspectors should have a separate division allotted to them, and there should be one if not two sub-inspectors at each of the principal presses.

7. Mr. Wilkinson, the senior inspector, has submitted a very interesting report on the different varieties of cotton that reach the Bombay market. The attention of the Chamber of Commerce will be requested to his remarks on the subject of the marking of bales. This is a matter regarding which the mercantile community must necessarily be the best judges.

8. Only thirty-one cases were tried under the Act. It is satisfactory, however, to find that one of the principal objects of the Act has been so far attained that the practice of fraudulent packing, once so prevalent, may be said to have been almost put a stop to.

9. Government concur with the Inspector-in-Chief in opinion against interference with damaged cotton stamped as such by consent of the owner.

10. The practice of destroying confiscated cotton should be discontinued. Adulterated cotton should, if possible, be cleaned and sold, or else, as has been done at Surat and Broach, made over to the Jail authorities to be worked up.

11. His Excellency in Council is glad to observe the success that has attended the endeavours of the officers of the Department to improve the cultivation of the staple and to introduce fresh varieties of cotton. When authorizing them to turn their attention to these objects, they were informed (paragraph 5 of Government Resolution No. 1948, dated 28th May 1866), that "the greatest care and caution must, however, be taken to prevent unwarrantable interference with the free actions of the ryot.

The inspectors in their efforts in this direction should invariably act under the instructions of the Collector, and bear in mind that their functions as police officers for the prevention of a certain description of offence are quite of a distinct and separate character." His Excellency the Governor in Council, while he has no reason to believe these instructions have been departed from during the past year, desires again to call special attention to them.

12. The successful efforts that have been made to introduce new varieties of cotton into Khandeish and Ahmedabad have already been separately noticed. An advance of Rupees 70,000 has been made to the Collector of Khandeish for the purchase of Hingunghat seed.

Government Resolution No. 301, dated 23rd January 1866. Government Resolution No. 1251, dated 28th March 1867.

13. The suggestion to dispense with a boat and crew during the monsoon in the Panwell Creek is approved.

14. The scale of expenditure entered in Appendix **F** is sanctioned on the understanding that the reductions referred to in this Resolution will be made as soon as practicable.

F. S. CHAPMAN,
Chief Secretary to Government.

No. 155 OF 1867.

From the ACTING INSPECTOR-IN-CHIEF, Cotton Department,
To F. S. CHAPMAN, Esquire, Chief Secretary to Government, Bombay.

POONA, 13*th April* 1867.

SIR,—I have the honour to submit the Annual Report of this Department for the past year.

2. All receipts and disbursements on account of the Department are shown in Appendix **A**.

3. The number of bales of cotton exported from the Presidency amounts to 939,679½, and the fees levied on them to Rs. 1,76,189-14-6. Press License Fees, fines, and sale proceeds of confiscated Cotton amount to Rs. 6,733-0-0, giving as total of receipts for the year Rupees 1,83,858-12-11. Adding this sum to the balance of previous year, which, exclusive of advances, was Rs. 2,07,793-2-11, we had for expenditure in the year 1866 a total fund of Rs. 3,91,651-15-10. Deducting from this amount Rs. 2,18,052-15-7 as the disbursement of the past year, the sum to the credit of the fund stood at Rs. 1,73,599-0-3.

4. The outstanding advances made from time to time for the improvement of cotton cultivation, &c., amounting to Rs. 46,002-9-9, temporarily reduce the cash balance on the 1st January 1867 to Rs. 1,27,596-6-6.

5. The average receipts for the three years since the passing of the Act are Rs. 2,26,912-12-6. The receipts during the past year were less than this average by Rs. 43,053-15-7, and were Rs. 34,194-2-8 less than our expenditure, which, however, was Rs. 8,859-12-11 within the average income.

6. There was a great falling off in the quantity of cotton exported, which only reached 989,679½ bales; the exports for the previous year having been 11,39,006, showing a difference of 199,327½ bales, or a loss to the fund in fees of Rs. 37,348-14-6, more than sufficient to have enabled us to cover our expenditure.

7. As I have above shown that we exceeded our income, it may be proper for Government to take into consideration the necessity for either raising the export fee to four annas, as it stood in 1865, or for reducing the Department.

8. The increase to the fund from the addition of one anna, which is an almost imperceptible sum on a bale weighing 400 lbs., would give, calculating only on the low exports of last year, Rs. 58,698-11-0, and would not, I think, be objected to by the rate-payers who profit so largely by the efficient working of Act IX. of 1863.

9. The Department as now constituted and employed both in carrying out the provisions of the Act, and in improving cotton cultivation, is doing an amount of good to the cotton trade of India which can scarcely be overstated. Being firmly convinced by personal experience, not only of the vast usefulness of the Department, but the irreparable injury the cotton trade would suffer were inspection relaxed, I cannot conscientiously advocate any appreciable reduction in the establishment. As however Government may feel otherwise, I will, further on, when remarking on the work doing in the Poona Zillah (para. 106), point out where reduction might take place with, in my opinion, the least injury to the interests of the trade.

10. I think we may estimate the exports of cotton from the Presidency at not less than 1,000,000, a 4 annas fee on which would give Rs. 2,56,000, sufficient to pay this Department, and give a contribution of Rs. 40,000, which, I understand from Mr. Carnac, the Cotton Commissioner for the Central Provinces, is required to assist in defraying the expenses of his proposed establishment.

Act IX. of 1863.

11. Appendix **B**, which contains a Statement of cases convicted under the Act, shows a decrease of three cases as compared with those of the year 1865.

12. It will be observed that out of 31 offences against the provisions of the Act 21 came under Sections II. and III., which provide against "adulteration" and "deterioration;" 12 of these occurred at Broach, where the inspector and a newly-appointed very active and intelligent sub-inspector have been engaged during the season in endeavouring to purify the cotton trade.

13. As formerly pointed out by me, only decidedly fraudulent cases are taken up under these Sections II. and III. The departmental test, "readiness to remove and have cleaned or separated dirty or mixed cotton," is seldom rejected; we have therefore few cases to produce for the satisfaction of those who may require a long list of conviction as proof of the usefulness of the Act, or of the efficiency of the agency by which it is worked.

14. Some alterations in the Act proposed by Government are, I believe, still before the Chamber of Commerce.

15. Section XIV. of the Act provides that the proceeds of all Cotton confiscated under this Act shall be "carried to the credit of the Cotton Improvement Fund," but does not define the precise way in which these proceeds are to be obtained.

16. The Magistrate of Khandeish had all cotton confiscated in his district during the year burnt. This treatment of the case appears to me decidedly illegal. It would no doubt be very improper for Government officers to dispose of cotton in a state declared by its confiscation unfit for sale; but dirty cotton might be cleaned and sold, and adulterated cotton could be made of some use.

17. Mr. Merritt, inspector for Surat and Broach, details in para. 30 of his report the measures adopted in his zillah for dealing with confiscated cotton, which is worked up in the Jail for the benefit of the Fund. The arrangement appears extremely simple and sensible. Confiscated cotton is made over to the Jail authorities, who work it into cloth, rope, tape, &c. &c. The manufactured articles are sold, and the proceeds, less the Jail charges for labour, &c., are paid into the Government Treasury to the credit of the Cotton Improvement Fund. I think all Magistrates should be enjoined to adopt this plan with cotton which cannot be properly cleaned for sale.

18. Appendix **C** gives the number of presses licensed during the year.

19. In the city of Bombay, where steam presses had increased in the year 1865 from 42 to 117, we licensed 131, a further increase of 14.

20. In the Presidency we have had 150 steam presses at work during the year under report. In the previous year there were 139.

21. Presses worked by manual labour have been nearly given up in Bombay; 24 of these were licensed in 1865, but only six in the past year.

22. The state of the Bombay money market has told on some of the Press Companies in the Mofussil. Fine buildings remain in a half-finished state at Julgaum and Barsee, and the finished presses at the former place and in Sholapore have not been constantly in working order, from, I believe, a want of funds with which to carry them on properly. The Julgaum steam presses, which I have just visited, are now in full work, and have sufficient, I am told, to keep them constantly employed for the rest of the season. The very intelligent manager, Mr. McDonald, is doing much good at Julgaum by the way in which he looks after the condition of cotton offered for compression at his factory. He informs me that his buildings could contain two more presses, and as there is sufficient work to occupy four or six steam presses at Julgaum, I hope the company will be able to meet Mr. McDonald's views.

23. Half-pressing is not in favour in Khandeish. The "Forbes Lever Press" is an utter failure. The "The Hassard Press" answers its purpose perfectly, but its price in these unfortunate times is against its general introduction in Khandeish.

24. A great increase of work is being done in the ginning factories throughout the Presidency. Cotton passing through them is turned out much cleaner than by the churka, which however is still necessarily used in several districts where short staple cotton, unsuited to gins, is grown.

25. Appendix **D** shows the number of gins worked by steam power.

Experimental Cotton Growing.

26. The reports of the several Mofussil inspectors show in detail what has been done in furtherance of the views of Government, as expressed in paragraph 5 of Resolution No. 1,948, of 28th May 1866.

27. In *Ahmedabad* and *Kaira* experiments have been made with "Egyptian" and "Dharwar acclimatized" seed, and these have proved so successful that Mr. Whittle, agent for the Cotton

Ginning and Cleaning Company at Veerungaum, a gentleman who has great experience in the cotton trade, and who takes considerable interest in experiments, has applied for three tons of each of the above-named varieties. The same gentleman is also about to try how far the superior indigenous varieties of Kattywar—viz., "Mawa" and "Bhownuggur"—are suited so the soils and climate of the Ahmedabad Zillah.

28. The "Egyptian" Cotton raised by Mr. Whittle is declared by the Chamber of Commerce to be the best cotton ever grown in Western India; and the "American" as equal to the finest "Oomrawuttee."

29. In *Surat* and *Broach* experiments were made with Egyptian seed, but failed from what would appear to have been an unusually dry season at the close of the monsoon. Further experiments will be made next season with "Peruvian" and "Egyptian" seed.

30. In *Khandeish* "New Orleans," "Sea Island," "Egyptian," "Peruvian," "Dharwar acclimatized," and "Hingunghaut," were all tried; good specimens of these cottons were obtained, but with the exception of "Hingunghaut," none were found likely to yield paying crops.

31. An advance of Rs. 20,000 has been sanctioned to admit of "Hingunghaut" being substituted for Berar seed in two or three talookas, and from the plants thus raised it is expected that sufficient seed will be obtained to complete the sowing of the whole zillah.

32. From *Kulladghee* an application was received in June for a considerable supply of "Berar" seed, which, notwithstanding the lateness of the season, was brought down to Sholapoor for distribution. The monsoon set in suddenly and heavily, and great difficulty was, in consequence, experienced in forwarding the seed to the different mamlutdars; only a part reached in time for last season's sowing, and the rest, forwarded to Kulladghee, will, I believe, be sown next season. As yet I have no report of the cotton produced from the "Berar" seed.

33. "Dharwar American" is growing in favour with the ryots of some parts of the zillah. I saw the variety looking as fine and healthy as in the neighbouring zillah, where it thrives so well.

34. In *Sattara*, *Poona*, and *Ahmednugger*, experiments were made, but they were not successful. Applications have been made for about 4,000 lbs. of seed for next season's sowing, in Jamkhair Talooka of the Nugger Zillah. In Sholapoor and Mareh, in the Poona Zillah, and in Walva and Tas-

gaum, in Sattara district, experiments will be made with "Peruvian," "Egyptian" and "Hingunghaut" varieties.

35. In Talooka Malserus of the latter zillah, cotton is grown, but the cultivators at present hold off from experiments, having been, as they say, unfortunate in their endeavours to grow exotic cotton, from which they suffered heavy losses some years ago.

36. The exotic seed ordered for *Sind* arrived too late, in consequence of the ship making an unusually long voyage. The Sind sowing season being in March, requires that seed should reach Kurrachee in February; it is therefore difficult to supply fresh seed for that Province.

37. Egyptian seed has again arrived too late, and Mr. Walton has been unable to furnish Peruvian sufficiently early. Arrangements suggested by Mr. Walton will however be made, which will, I trust, ensure a seasonable issue of seed for sowing in 1868.

38. In Appendix **E** will be found a comparative statement of the area of land under cotton cultivation in the year 1866-67. In the same statement is shown the out-turn of cotton in the year under report (1866) and the estimate for 1867.

39. Cotton cultivation, which had increased in the year 1864-65 to a total of 2,071,804 acres, fell at the close of the American war in 1865-66 to 1,749,795 acres. It was again increased in the year 1866-67 to 1,955,326.

40. It is idle to make any estimate of the quantity of cotton which may be exported during the year. We have no returns to guide us in calculating the amount grown beyond the limits of this Presidency, which may pass through Bombay and Kurrachee.

41. The crop throughout the Presidency, except in Belgaum, is unusually good in quality and condition. I will only specially instance the improved "Khandeish," which is found to yield an average of 70 lbs. to the acre, when last year it was only calculated at 50 lbs. Altogether, I think that those concerned in improving the staple and its condition, and in increasing the supply in this Presidency, may be congratulated on the result of their labours, which I believe will go far to permanently raise the value of Indian-grown cotton in the Home Markets, and establish our cotton trade in a position to compete successfully with America

42. In handing up the reports of the several inspectors, as ordered in paragraph 9 of Government Resolution No. 1948, of 28th May 1866, I beg to offer the following few remarks :—

Bombay.

43. The only one of the Inspectors who has been at work the whole year, and who has had much experience of the duties of the Department, is Mr. Wilkinson. The other gentlemen had at the close of the year only been five months in office. The number of sub-inspectors was raised from seven to nine after receipt of Government Resolution No. 1948, of 28th May 1866.

Inspectors.
Mr. Wilkinson
,, Turner.
,, Pearson.

44. The above staff of officials had to watch the cotton pressed in 131 steam and six manual labour presses, distributed in 14 separate buildings. It will thus be seen that each inspector had as an average, nearly five press buildings to attend to daily, the sub-inspectors being distributed so as to ensure, as far as possible, constant supervision whilst the presses were at work.

45. It has been found in practice that little attention is necessary from this Department in presses while being used by European merchants, but that while cotton is undergoing compression for others they must be constantly watched to ensure cleanliness, &c. The duty of inspection is therefore so apportioned that while part of every batch of cotton is seen by an officer of the Department in the course of passing through the presses, the strictest attention is paid where European merchants are not concerned. This will account, I think, for a remark which I have heard has been made by some merchants, that at times when inspecting their own cotton in a certain press they have not observed an officer of this Department.

46. I believe that the attendance of our officers is most constant and regular where it is required. In the case of European firms pressing, our officers see that the cotton is good, and examine it from time to time during the day, but where doubtful or bad cotton is offered for compression by others the examination is more strict, from 50 to 100 per cent. being tested.

47. Mr. Wilkinson's valuable report reviews all the varieties of cotton passing through the Bombay presses, and points out the great improvement observable in its condition.

48. I do not believe any one will now deny that the condition of cotton is vastly improved, although there are some who still refuse to admit the amount of benefit done to the trade by Act IX. of 1863. It may be here casually remarked that this improvement by a "curious coincidence" dates from the passing of the Act.

49 All accounts from England and all Cotton Circulars issued during the year have borne most favourable testimony to the improved condition in which cotton is received in the Home markets.

50. Paragraph 12 of Mr. Wilkinson's report contains a detailed account of measures adopted last year with a view to placing at the disposal of merchants what we considered very valuable information, enabling them to ascertain the condition of cotton consignments passed through the presses, on which they might be asked to make advances. Extracts from our press books are still sent to the Chamber of Commerce, but that body does not appear either to make use of them in their present state, or point out how they might be made of more value.

51. I think the system of affixing marks on all pressed bales, denoting their condition, an excellent and useful one, and I also think no bales should be allowed to leave a press falsely marked,—*i. e.*, that the marks on a bale should denote the true contents—that cotton from Sind should be marked with the letter S, and not bear F. O., denoting finest Oomrawuttee, one of our best staples. Merchants, however, say it is quite immaterial what marks are placed on a bale, as they only purchase after examination of the contents, and that they never trust to marks, but to the cotton itself, or to the character of the shipper, in the event of advances being required on consignments for the Home market.

52. The case mentioned in paragraph 15 of Mr. Wilkinson's report, and in paragraph 10 of that of Mr. Pearson, is, I think, a clear proof that marks, if attended to, may be of the highest value, and may protect some merchants at least from large losses.

53. I append, marked **G**, copy of a letter from the Chamber of Commerce on the subject of falsely marking bales.

54. I beg to draw particular attention to paragraph 16 of Mr. Wilkinson's report.

55. Referring again to paragraph 15 of Mr. Wilkinson's report, I beg to remark that as long as we are allowed by exporters to stamp "Damaged" Cotton and "Pickings" with our office brands, I do not think we can interfere with such declared inferior cotton going forward. All cotton has a value in the Home market, the very worst being applicable to the manufacture of paper.

56. Mr. Pearson, in paragraph 9 of his report, remarks on one or two presses working on Sunday. Wool is chiefly pressed

on these days. Mr. Wilkinson has now made an arrangement for the inspection of cotton when pressed, the managers having promised to give information on the subject.

57. I beg to draw attention to Mr. Wilkinson's valuable report, as a fair and truthful exposition of the state of the different varieties of cotton as they appeared at the presses in the year 1866, and take this opportunity to bring to the special notice of Government the very great assistance which I have received from Mr. Wilkinson, senior inspector in Bombay, during my necessarily frequent and long absences on official tours through the Presidency.

58. Mr. Wilkinson's management of inspection at the presses in Bombay, his conscientious attention to duty, and his great zeal are deserving of every praise.

59. Mr. Wilkinson's Report is marked **H** and that of Mr. Pearson **I**. As Mr. Turner was absent on sick certificate I did not call for a report from him.

Ahmedabad and Kaira.

Inspector.
Captain Moore, V. C.

60. A great deal of good will, I hope, be derived from the zealous and active way in which Captain Moore has travelled through his very large district, impressing on the ryots the necessity for care in the cultivation and picking of their cotton.

61. In Kaira Zillah it will be seen that little cotton is grown for export, the inhabitants requiring nearly all of their crop for home consumption. The plant is usually grown with some other crops, and is a matter of secondary consideration with the ryots.

62. Undoubtedly a considerable portion of the zillah is suited to the growth of cotton. I think it therefore probable that the ryots may be induced to sow it in a more regular way, should we be able to prove that the cultivation of some exotic or superior indigenous variety would be more remunerative than their present carelessly grown crop.

63. I have no doubt that Mr. Borradaile, who is particularly alive to the interests of his zillah, will continue to encourage such small experiments as he may consider advisable.

64. I do not think that it is necessary to bribe cultivators to try experiments by promising to remit revenue on ground devoted to the growth of exotic cotton. Comparatively small experiments will be sufficient to prove the value of any variety, and I believe the Guzerattee ryot is quite able to appreciate what would be to his advantage.

65. In Ahmedabad Zillah the most valuable experiments have been carried on. Mr. Whittle has grown Egyptian and Dharwar American Cotton in sufficient quantity to satisfy himself that both these varieties are well suited to his part of the country, and has applied through this Department for three tons of each variety for sowing, next season, about Verungaum.

66. The sample of Egyptian grown by Mr. Whittle, submitted to the Chamber of Commerce, is declared to be "the finest grown in Western India," and I have been informed by one of the most experienced merchants in Bombay was fully equal to that grown in Egypt. The American acclimatized was considered to rank with "the best Oomrawuttee."

67. Should the proposed large introduction of the above-named two varieties turn out successful, it is hardly possible to calcutate the good which may be done to cotton cultivation by extending the growth of these most valuable cottons, and pushing out that which Mr. Wilkinson remarks is "rough and hard to the touch, and possesses a short staple."

68. Captain Moore continued to contend successfully against the use of Marwar Cotton for the purposes of adulterating the better staple grown within his range. The increased number of convictions under Act IX. of 1863 will, I hope, have a good effect. There is no legal objection to Marwar or any other equally inferion cotton reaching Bombay. All we can hope to do at present is to keep it separate—and as merchants in Bombay declare their inattention to marks, they need not be imposed upon by persons who take advantage of Section 9 of Act IX. of 1863 for the supposed purpose of misleading. The last year's cotton from Ahmedabad Zillah, although still leafy, was cleaner than in former years. It did not appear to have been wilfully deteriorated, but to have suffered from careless pickings. The trouble which Captain Moore has taken in explaining the necessity for clean picking, will, I trust, cause improvement in the appearance of the next crop on its arrival in the Bombay market.

69. A very erroneous impression, detrimental to cultivators, dealers, and others, exists in Bombay, that all cotton from Ahmedabad is more or less adulterated with Marwar Cotton. That such was the case formerly is true, but it is equally true that under the watchfulness of this Department this sort of adulteration has ceased to exist.

70. It has come to my notice that Verungaum Cotton stamped as forwarded *via* Ahmedabad realizes a much lower price than the

same cotton going *via* Dhollera, and yet purchasers say they do not note take of marks. In justice to Veerungaum and Ahmedabad dealers, I wish to point out that adulteration with Marwar cotton has been put an end to in these districts.

71. I beg to draw attention to Captain Moore's judicious circular, appended to his report, marked **J**.

Surat and Broach.

Inspector, Mr. Merritt,

72. There is not much room for experimenting in this division, the cotton already grown in the country being considered of a good character. The staple is, as stated in Mr. Wilkinson's report, "long, soft, and silky." Mr Merritt very properly turns his chief attention to improving the condition of the cotton he has at hand, and in preventing mixture or adulteration. Some experiments were, however, made at the request of the Collector, with Egyptian seed. They may be set down as failures, the absence of a sufficient fall of rain after the close of the S. W. monsoon having apparently proved fatal to the plant. Some fresh experiments will be made next season with Egyptian and Peruvian seed. The latter, I think most likely to succeed near the coast, the plant appearing to like sea air.

73. The system of cleaning cotton in the ginning factories established in Surat and Broach gains favour. All the gins were fully employed, and the demand for more so urgent that fresh factories are in course of erection. Cotton is turned out from these establishments in an extremely clean state, and opportunities for adulteration are much reduced, if not altogether removed. I trust ginning establishments may be set up all over Guzerat.

74. Mr. Merritt has, as usual, been very active in bringing forward cases under Act IX. of 1863, obtaining 16 convictions.

75. The arrangement for working up confiscated cotton, entered into with the Surat Jail authorities, works well. A similar one should, I think, be made in all the zillahs of the Presidency.

76. The sub-inspectors have been actively employed during the year, and have done much towards keeping cotton in the cleanly state in which it was received at the presses in Bombay, as noticed by Mr. Wilkinson. I am, however, unable to apply for an increase of pay to any of the present establishment, or for sanction to employ more men.

77. Mr. Merritt proposes to alter the preventive system by placing at the mouths of creeks gun-boats, commanded by European constables. I do not think the pay proposed is sufficient to obtain the services of trustworthy Europeans.

78. The alterations made last year, which placed well-paid Europeans in command of the Taptee and Nerbudda Preventive Boats, had only a trial of three months up to the end of the year under report—an insufficient time, I consider, for the formation of a correct opinion as to the efficiency of the arrangement.

79. It is extremely difficult to put an end altogether to the cotton robberies committed by boatmen on the coast. That this crime is greatly reduced is, I think, proved by the state in which cotton reaches the Bombay presses. We hardly ever hear of deficient weight being made up as formerly by the addition of rubbish or water.

80. I believe nearly all cotton stolen in the coasting boats is landed in small quantities either in the Baroda or Sucheen territory, in consequence of our better system of police rendering it more difficult for the traffic to be carried on in our districts. Mr. Hope will, I have no doubt, pay attention to Sucheen, and the Resident at Boroda will, I am certain, if applied to, move the Durbar to endeavour to prevent the subjects of His Highness receiving stolen cotton within their villages.

81. The subject noted in paragraph 58 of Mr. Merritt's report, "Payments in kind," is very difficult to deal with, being a custom which has been sanctioned in India for ages. It is no doubt objectionable in the instance of cotton, as pointed out by Mr. Merritt, but I doubt whether interference is absolutely necessary Mr. Merritt's report is marked **K**.

Khandeish.

82. Mr. Ashburner's zeal in the cause of cotton improvement has kept his district far in advance of all others in the Presidency in respect of experiments. Mr. Hewett and his sub-inspectors continue to aid the Collector with their accustomed energy.

Inspector, Mr. Hewett.

83. The old Khandeish seed has been almost entirely bought up, and the little left will, I believe, be got rid of this season. The new cotton raised from seed brought from Berar in the previous year is reported excellent, and the amount of good done by ts introduction to all concerned in the trade far exceeds what could have been anticipated.

84. Mr. Ashburner, in a letter to the Revenue Commissioner, copy of which he has favoured me with, and which is attached to Mr. Hewett's annual report, shows that the improved cotton "has not only paid the whole of the land revenue, but has left a surplus of 24½ lacs in the hands of the ryots and local dealers, and it may be considered to that extent a permanent increase to the wealth of the province."

85. Some fresh experiments were made with exotic seed, but none did sufficiently well to give hope that the crop would remunerate the ryot. Hingunghaut seed, however, appears well suited to the district, and as the value of the cotton in the market is about Rs. 20 or 30 per candy above the average price of the present Khandeish cotton, Mr. Ashburner has obtained sanction for the general introduction of the variety into two or three of his Talookas. Should his hopes be realized the Collector will be able next season, from the plants grown in this way, to obtain seed for sowing the remainder of the zillah.

86. I have shown in paragraph 51 of this report that merchants do not trust to any marks on bales, and therefore it does not appear necessary to refer at length to the subject of Mr. Hewett's pragraph 6 (2).

87. Merchants say they always inspect cotton previous to making a purchase, and as Mr. Hewett states it would be impossible to pass off "Hoosungabad" for improved "Khandeish" on any one acquainted with cotton, I do not see merchants are likely to be cheated by an alteration in the shape of a bale; and with regard to remarks on full pressing of inferior cotton in a Khandeish press, I am happy to be able to say, that the gentleman in charge of the only steam presses in the zillah informs me that he declines to press such cotton, unless he is allowed to mark on each bale its exact contents.

88. I trust that Mr. Hewett's local influence will be sufficient to prevent Hoosungabad cotton from being mixed with new Khandeish. This is the great danger at present to be feared. Hereafter, I hope the newly-appointed Cotton Commissioner for the Central Provinces will be able to do for Hoosungabad what Mr. Ashburner and Mr. Hewett have done for Khandeish.

89. Mr. Ashburner, in paragrpah 8 of his letter, states that there is reason to believe that the standard of what constitutes clean cotton is lower in Bombay than it ought to be, and in support of this position says that when cotton full of dirt is stopped at the Julgaum presses, the dealers plead that such cotton is pressed in Bombay; but these dealers appear to have left

Mr. Ashburner in ignorance of the fact that all such dirty cotton has long been carefully branded as "damaged" or "pickings" by the officers of this department, with the consent of the dealers and managers of presses, with one solitary exception, that of the Apollo Press Company, managed by Messrs. Remington and Co. This Company, I know not why, systematically refuses to assist this Department in having inferior cotton properly branded so as to prevent its appearance in the Home market under the false colouring of marks, which should, for the credit and benefit of the Bombay cotton trade, only be affixed to bales containing good clean cotton.

90. When lately in Khandeish, Mr. McDonald, the manager at Julgaum, informed me that he did not allow inferior cotton to leave his press factory until it was truly marked.

91. Mr. Hewett, in pragraph 12 of his report, applies for a reward for the mamlutdar of Errundole of Rs. 150. This officer's name was submitted to Mr. Bulkley in the year 1865 with those of two other mamlutdars, but was excluded from that gentleman's report for, I presume, sufficient reason. I told Mr. Hewett that under such circumstances I could not apply for the reward, and suggested his awaiting Mr. Bulkley's return to office before again bringing the claim forward.

92. In the present state of the cotton improvement fund, I cannot support Mr. Hewett's application for more sub-inspectors, or purpose an increase of pay to his son Mr. P. Hewett, sub-inspector; could we afford any increase in expenditure, I would ask it for some of the sub-inspectors in Bombay, where living is very expensive and the work extremely heavy.

93. In the last paragraph of Mr. Hewett's report, he brings to notice his own services, and claims to have his pay raised. I take this opportunity to acknowledge Mr. Hewett's excellent service in the department, but must at the same time say that I consider Rs. 900 per mensem is very fair pay for the cotton inspector of Khandeish. Mr. Hewett's report is marked **L**.

Dharwar, Kulladghee, and Belgaum.

Inspector, Mr. Blackwell.

94. In the Dharwar Zillah it was found necessary last year to be more strict in enforcing the Act, to put an end, if possible, to the mixture of the indigenous with the American cotton. This adulteration was known usually to take place at the gins, and to these establishments Mr. Blackwell turned his particular attention. Although but few convictions were obtained, much good was, I believe, done by bringing cases forward.

95. I am now informed that cotton from this zillah has never gone forward in such a state of purity as during this present season.

96. Great attention was paid by this Department, and by that of the Collector, in causing the two different varieties of cotton grown in this district to be kept perfectly distinct in the field. I travelled through miles of cotton plants, and was surprised to see what had been effected in this way. The ryots appeared to have been easily taught the value of the measure, and readily pulled up intruding plants from their fields.

97. The great interest taken by Mr. Reid in the cotton of his district has led his subordinates to exert themselves for the benefit of the crop, and the support given by the same gentleman to the officers of this Department has tended to render their efforts for improvement so successful.

98. I regret to find that the Belgaum grown indigenous cotton is still considered very seedy, but think that Mr. Blackwell exaggerates the extent of the evil. I know that much of this cotton, nearly all of which reaches Vingorla, is seedy and dusty, but so well mixed is it, that it would be difficult to say whether its state was caused by the wilful introduction of seed and dust, or whether it had in the first instance been badly picked and cleaned.

99. Much good is being done by the very strict inspection which cotton now for the first time undergoes at Mr. Elsam's hands in Vingorla, and I trust that the trouble which he imposes on cotton owners, by insisting on all over seedy and dirty docras being carefully cleaned before he allows them to be embarked for Bombay will in future years cause consignments to be sent down the ghauts in better order.

100. In Kulladghee Zillah, near the border of Dharwar, I saw the acclimatized American plants quite as fine as those growing in Dharwar. The fields were not, however, kept as clean, or the varieties so distinct as in the latter zillah. I hope Mr. Blackwell will be able to cause improvement in this respect.

101. The Collector applied for a supply of Berar seed for sowing in a part of his zillah which he considered this variety would suit. Nearly 50 tons were supplied by this Department under Government Resolution No. 2163, of 23rd May 1865. Unfortunately, the rains set in suddenly and heavily, and difficulty was found in obtaining carriage for forwarding it from Sholapore, and distributing in the Kulladghee zillah the whole quantity transmitted.

102. I have not yet received a report on the plants raised from the portion of seed which was sown in proper time, nor have I been able to close the account of cost of seed, &c. I however hope in a few days to hear that a satisfactory settlement has taken place.

Poona, Ahmednuggur, and Sattara.

103. The appointment made within the year of a sub-inspector at Sholapore, the chief cotton depot within Mr. Manley's range, has enabled that officer during the fair season to turn his attention more to the improvement of cotton cultivation than he was formerly at liberty to do, when I was obliged to restrict him to Sholapore, Barsee, and Barsee Road Station, as the great cotton depots requiring inspection within his range.

Inspector. Mr. Manley.

104. The result of Mr. Manley's tour is that a considerable quantity of exotic seed, about 4,000 lbs., has been already applied for by the ryots. I have little doubt but that the general introduction of some of the foreign varieties which we are about to try, or of some of the superior indigenous cotton from other districts in this Presidency, will be greatly to the advantage of the cotton trade.

105. I hope hereafter that steam ginning establishments may be introduced, as suggested by Mr. Manley, at Mareh and other places, and that the presses at Barsee may be completed.

106. Should it be thought necessary to reduce the Department consequent on the falling off in the amount of receipts from the Export Fee, I think a reduction can be better made in the Poona establishment than in any other branch of this Department.

107. The extent of cotton cultivation within the Poona, Ahmednuggur, and Sattara zillahs is less at present than in any other of our cotton growing districts.

108. A well paid sub-inspector at Sholapore would be able to inspect the cotton coming to that station, as well as to Mareh, Barsee, and Barsee Road Station, and the duty of improving and increasing the cultivation of cotton in these districts might be distributed thus:—

Ahmednuggur, to Inspector of Khandeish.

Poona and Sattara, to Inspector of Dharwar, transferring Belgaum from Dharwar to the Inspector of Canara.

The pay of the sub-inspector at Sholapore should be Rs. 200, with Rs. 25 for contingent charges. The present pay of the officer is Rs. 150.

109. The amount now sanctioned for Sattara, Poona, and Ahmednuggur, is monthly—

Inspector	Rs.	900	0	0		
1 Sub-Inspector	„	150	0	0		
Contingent charges	„	150	0	0		
Sub-Inspector's Peons	„	18	0	0		
					Rs. 1,018	0 0
This might be reduced to—						
1 Sub-Inspector	Rs.	200	0	0		
Contingent charges	„	25	0	0		
Peons	„	18	0	0		
					Rs. 243	0 0
Monthly saving					Rs. 775	0 0

making an annual saving of Rs. 9,300.

110. This arrangement, if made, I propose to carry out on the first occasion of a vacancy in the department, which will admit of Mr. Manley's being provided for elsewhere.

111. I only suggest this Poona reduction under pressure, caused by the deficiency in our receipts. Mr. Manley, who has become well known in his districts, has by his personal influence greatly interested the ryots this year in his measures for improving the cotton of his three zillahs. Cultivators have applied for 3,160 lbs. of exotic seed, and for 50 maunds of Oomrawuttee and Hingunghaut for experiments, an immense advance for these districts in the cause of improvement.

112. It is due to Mr. Manley to say that he has been very active and zealous in travelling through his very extended range, and that I believe much good will result from the way in which he has endeavoured to impress on cotton cultivators the advantages likely to be delivered by paying more attention to their crops, and trying by experiments to ascertain what variety of seed is best suited to their land.

Canara and Ruttnagherry.

113. The inspector has continued to inspect with great zeal cotton arriving at Coompta for export to Bombay. He has also paid visits to Vingorla, where his supervision, with that of the sub-inspector, has had a very good effect in causing Belgaum cotton to be sent forward in a much cleaner state than was the case in the previous year, before any officers of this department were appointed to inspect cotton leaving this port.

Inspector. Mr. Stranack.

114. During the past year 65,464 docras of cotton were exported from Vingorla; much of this was brought down in a very seedy state, but the sub-inspector, Mr. Elsam, a good judge of cotton, was able by personal influence to have it cleaned before being shipped for Bombay.

115. Consequent on the depressed state of the trade, the exports from Coompta fell very short of the quantity usually sent from that port to Bombay. In the last two months of the year 20,884 docras were forwarded. A large quantity which remained stored from last season was much injured in colour by the damp during the monsoon. This, which formed the first export of the current season, considerably disappointed merchants, who found it very difficult to do business with dealers, who insisted in keeping up prices on a deteriorated article.

116. I regret that the fine steam presses belonging to the Carwar Company at Carwar should have been idle the whole year. The advantages of Carwar are so many, one is led to wonder that the entire trade of Coompta has not ere this been moved from that insecure open roadstead to the safe harbour at the former place.

117. All cotton exported from Coompta must go off in small boats at certain times of the tide to pattimars lying two miles at sea outside the bar, where cargo cannot be taken on board when the weather is at all rough. On the other hand at Carwar ships can come into smooth water, I believe, alongside the pier, so that cotton can at all times be shipped in perfect safety.

118. The road from Hooblee to Carwar down the Arbyle ghaut is in excellent order, and is bridged throughout; some of the bridges however, require repair.

119. The ghaut is an easy incline, and has lately been widened and otherwise improved; and at Carwar there is a fine establishment of steam presses ready within a few yards of the pier, to press, for direct export to Europe, the whole cotton crop of the Dharwar zillah.

120. I am glad to hear from Mr. Stranack, since my return from Canara, that the Carwar Press Factory has been at work, and that hopes are now entertained of a strong competition arising between the rival ports, resulting, I trust, in furnishing a constant supply of cotton for direct export to Europe from Carwar. The movement, I am given to understand, is likely to be well supported by some Dharwar dealers.

His Highness the Hubshee's Territory.

121. The servants of His Highness have continued to act with fairness in supporting our endeavours to keep down the old system of cotton robberies along this coast. The vigilance of the inspector, who cruises nearly all the fair season off the small creeks and ports where stolen cotton used formerly to be landed, has done great good, and has, as far as I am able to learn, nearly put an end to what was considered by those concerned as a regular trade.

Inspector. Mr. Boorhanoodin.

122. So little cotton comes down by the cart roads now to Panwell and Kussaylee Bunder, I do not think it necessary to keep up a boat and crew during the monsoon season. The inspector, living at Tanna, can visit Kussaylee by road whenever he finds it necessary, and may proceed to Panwell or Oolwa Bunder, if cotton is found to be stored at the former place, by hired boat, the cost of which might be included in my monthly contingent bill. This measure would effect a saving of Rs. 696 between the 1st June and 1st October.

Sind.

123. The remarkable increase in the number of pressed bales exported direct to Europe from Kurrachee is very satisfactory. I hope that by degrees the short stapled cotton grown in Sind, and all that comes down the Indus, may be pressed and exported direct to Europe, and that none may come to Bombay, where we have much trouble still in watching that it is not used for the adulteration of our good cottons.

Inspector. Mr. Beyts.

124. The number of presses kept at work increased from five to nine, and these seem to have turned out above 63,000 bales.

125. Including the cotton exported in docras, the total amount which left Kurrachee during the year under report equalled in quantity 73,511 pressed bales.

126. I do not think the rules referred to in paragraph 6 of Mr. Beyts' report are necessary. The inspectors in Bombay and other places are able to manage by personal influence the matter provided for in rules 1 and 3, and with reference to rules 2 and 4 I may remark that it is the duty of the officers of this department to see that the law is not infringed.

127. Since writing his report Mr. Beyts has started on a tour through the cotton growing districts in Sind. I hope he will be able to obtain information regarding experiments made within his range.

128. The sowing season is so very early in Sind, it has hitherto been difficult to provide fresh seed in time for experiments. I hoped we might have had Egyptian seed sufficiently early this year, but have been disappointed, and the same has occurred with regard to Peruvian, Mr. Walton having disposed of his acclimatized before the Sind application reached him.

129. I trust that next season we shall be able to make arrangements for a timely supply, it being very important to test on an increased scale the suitability of the Sind soils and climate to the growth of both Egyptian and Peruvian cotton; of the latter variety there are a few thriving plants in Kurrachee.

130. A report on the experiments with gins, referred to in paragraph 20 of Mr. Beyts' report has not been received.

Foreign States.

131. There is still complaint in the Bombay cotton presses against the leafy and dirty state of some of the cotton from the territory of His Highness the Guicowar, and from parts of Kattywar.

132. During my last visit to Guzerat I had, through the courtesy of the Resident, two or three interviews with His Highness the Guicowar's intelligent Minister, who appears anxious to improve the condition of cotton exported from the States.

133. I had also the advantage of being able to accompany the Resident, Colonel T. Barr, on a visit of inspection which he paid to a tramway in His Highness' territory. This tramway acts as a railway feeder, and runs from "Daboye" a distance of 18 miles to "Kurjun," where it joins the Bombay, Baroda, and Central India Railway line. It was, I believe, laid down three years ago, but fell into great disrepair. This year the line has been farmed out, and is being put in perfect order. The cotton from some of His Highness' richest districts will by it reach the Railway in better order than is possible at present, after travelling over very bad dusty roads. At Kurjun the farmer pointed out to me several cases containing gins, which he was about to erect, and told me that he hoped to be able to start presses also. These measures will tend to improve the cotton from Baroda territory, which is now complained against in Bombay. The Rao Saheb is fully alive to the benefit which would accrue to the Guicowar's ryots by improving their cotton. I therefore hope he will not lose sight of the subject.

134. During the visit of His Highness the Thakoor of Bhownuggur lately to Bombay, I took the opportunity to speak to His Highness's Minister regarding the good but carelessly picked cotton sent down from the Bhownugger State, and was assured that orders had been issued on the subject by the Durbar, and that every endeavour would be made to meet the views of this Government.

135. In conclusion I beg to say that within the year under report I visited Sind, Guzerat, the Deccan, and Southern Mahratta country, and that I have just returned from Khandeish.

136. Appendix **F**. is the usual comparative statement of the expenditure sanctioned for the Department for the year 1866, and that proposed for the current year, which required the sanction of Government.

I have the honour to be, &c.,
CHAMBERLEN W. WALKER, Lieut.-Colonel,
Acting Inspector-in-Chief, Cotton Department.

APPENDICES.

A.

STATEMENT showing the Receipts and Disbursements

	Receipts.					
	Sale of Seed and Refund of Advances.	Fees levied on bales exported to Europe.	License Fees on Cotton Presses.	Fines and sale proceeds of adulterated Cotton under Act IX. of 1863.	Retrenchments for Peons' Clothing, Savings, &c.	Total.
1	2	3	4	5	6	7
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Ahmedabad	.....	.....	133 0 0	2,433 6 10	26 2 10	2,592 9 8
Ahmednuggur	9 8 9	.....	.....	.....	.....	9 8 9
Belgaum	.....	.....	.....	.....	1 1 3	1 1 3
Khandeish	11,941 12 9	.....	.....	55 8 0	33 9 0	12,030 13 9
Canara	4 6 0	.....	.....	.....	17 2 8	21 8 8
Dharwar	2,212 9 3	.....	.....	494 0 0	15 1 6	2,921 10 9
Hydrabad	.....	.....	.....	.....	.....	.....
Kaira	.....	.....	19 4 0	.....	.....	19 4 0
Kulladghee	...	... ..	.....	.....	.....	.....
Kurrachee	91 8 10	12,095 1 0	41 0 0	200 0 0	75 7 9	12,506 1 7
Poona	958 2 0	.....	10 0 0	10 0 0	630 7 5	1,608 9 5
Rutna herry	.....	.....	.....	.... .	.....	.....
Sattara	.....	.....	.....	.....	.....	.....
Shikarpore	.....	.....	.....	.....	... ..	.....
Sholapore	.....	... ..	...	.....	.....	.....
Surat	19 0 2	.....	186 0 0	2,486 13 2	44 2 5	2,735 15 9
Tanna	.....	.....	.....	.....	12 0 0	12 0 0
Commissioner of Customs, Salt, and Opium	.....	1,64,094 13 6	661 0 0	.....	80 11 7	1,64,836 9 1
Grand total Rs.	15,236 15 9	1,76,189 14 6	1,053 4 0	5,679 12 0	935 14 5	1,99,095 12 8

of the Cotton Improvement Fund during 1866.

Disbursements.						Remarks.
Pay of the Establishment.	Permanent Travelling and Conveyance Allowances.	Contingent Charges of every description	Rewards.	Advances.	Total.	
8	9	10	11	12	13	14
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs a. p	Rs. a. p.	Rs. a. p	
16,302 3 2	2,205 0 0	519 3 5	.....	.....	19,056 6 7	
.....	.....	.....	.....	.....	.....	
7,519 14 9	455 13 9	545 7 0	.....	.....	8,521 3 2	
12,636 0 0	1,800 0 0	588 15 6	.....	15,432 6 5	30,457 5 11	
7,043 15 0	2 200 0 0	259 2 8	161 14 0	.....	9,664 15 8	
11,573 15 0	1,800 0 0	559 12 0	.....	5,570 0 0	19,503 11 0	
.....	.....	... ..	... ...	... ...	.....	
... ...	.....	100 3 10	.....	.....	100 3 10	
1,122 5 8	200 0 0	33 0 0	.....	.....	1,355 5 8	
10,248 8 11	2,400 0 1	1,073 13 4	.....	.....	13,722 6 4	
34,436 9 1	.....	7,054 12 1	.....	.....	41,491 5 2	
840 0 0	.....	.....	.....	.....	840 0 0	
.....	.....	.....	.....	56 15 6	56 15 0	
.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	
23,084 9 3	2,200 0 0	551 0 0	50 0 0	60 0 0	25,975 9 3	
4,544 2 1	1,100 0 0	.....	.....	.....	5,644 2 1	
52,595 7 9	750 0 0	9,437 3 7	.....	25,580 7 0	88,363 2 4	
1,81,947 10 4	15,110 13 10	20,782 9 5	211 14 0	46,699 12 11	2,64,752 12 6	

Chamberlen W. Walter, Lieut.-Colonel,

Acting Inspector-in-Chief, Cotton Department.

B.

STATEMENT of Cases tried during the past year, 1866, under Bombay Act IX. of 1863.

No.	Locality.	Under Sec. II. of Act IX. of 1863.	Under Sec. III of Act IX. of 1863.	Under Sec. VIII. of Act IX. of 1863.	Under Sec. X. of Act IX. of 1863.	Total.	Convictions and Sentences.
1	Ahmedabad	1	...	1	1	3	Case under Sec. II.; fined Rupees 25, and the cotton confiscated. Do. Sec. VIII. do. 100, and to suffer one month's simple imprisonment. Do. Sec. IX. do. 10.
2	Broach	4	8	...	4	16	4 Cases under Sec. II.; to suffer two months' rigorous imprisonment; to suffer one months' rigorous imprisonment and cotton confiscated; to suffer half an hour's simple imprisonment and cotton confiscated; and to suffer one hour's simple imprisonment and cotton confiscated. 8 Cases under Sec. III.; fined Rupees 30 and cotton confiscated; fined Rupees 40 each and cotton confiscated of six persons in six cases; fined Rs 10 and cotton confiscated. 4 Cases under Sec. IX.; fined Rs. 50 each, two persons in two cases; fined Rs. 30; and fined Rs. 10.
3	Khandeish.....	1	3	...	...	4	1 Case under Sec. II.; fined Rs. 200. 3 Cases under Sec. III.; sentenced to suffer three months' rigorous imprisonment; to suffer three months' rigorous imprisonment; and to suffer one months' simple imprisonment.
4	Dharwar	2	...	...	...	2	2 Cases under Sec. II.; fined Rs. 200 and cotton confiscated; Rs. 500, three months' rigorous imprisonment, and cotton confiscated.
5	Sind	...	...	1	...	1	1 Case under Sec. VIII.; fined Rs. 200 and cotton confiscated.
6	Surat	2	...	..	3	5	2 Cases under Sec. II.; sentenced to suffer one hour's simple imprisonment; and in the other half an hour's simple imprisonment. 3 Cases under Sec. IX., fined Rs. 50; Rs. 25; Rs. 200; and cotton confiscated of three cases.
	Total...	10	11	2	8	31	

Chamberlen W. Walker, Lieut.-Colonel, Acting Inspector-in-Chief, Cotton Department.

C.

STATEMENT of Cotton Presses established throughout the Bombay Presidency, in 1866.

No.	Collectorates.	No. of Presses.		Localities in which Presses are situated.	Remarks.
		Worked by Manual labour	Worked by Steam power.		
1	2	3	4	5	6
1	Ahmedabad and Kaira.	111	.....	Ahmedabad.	
2	Bombay Island	6	131	Fort, Colaba, Mandvee Bunder, and Carnac Bunder.	
3	Canara	.....	7	Carwar.	
4	Khandeish	.....	1	Bosawul.	
		1	1	Julgaum.	
5	Sind	4	7	Kurrachee.	
6	Sholapore	.....	2	Sholapore.	
7	Surat and Broach ...	71	.....	Surat.	
		87	1	Broach.	
	Total.....	280	150		

Chamberlen W. Walker, Lieut.-Colonel,
Acting Inspector-in-Chief, Cotton Department.

D.

STATEMENT of Cotton Gins worked by Steam Power in the Bombay Presidency.

Collectorate.	Stations.	Gins.
Ahmedabad	Ahmedabad	134
	Verungaum	
Khandeish	Bhosawul	40
	Julgaum	90
	Musawud	30
Surat	Surat	500
	Broach	
	Randur	
	Total	844

CHAMBERLEN W. WALKER, Lieut.-Colonel,
Acting Inspector-in-Chief, Cotton Department.

E.

COMPARATIVE STATEMENT of the Area of Land under

Locality.	For the year 1865-66.						For the year 1866-67.			
	Indigenous Cotton.		Exotic Cotton.		Total.		Indigenous Cotton.		Exotic Cotton.	
	Acres.	Pounds.	Acres.	Pounds.	Acres.	Pounds.	Acres.	Pounds.	Acres.	Pounds.
Ahmedabad	257,641 9	12,882,050	5 0	250	257,646 9	12,882 300	220,027 32	11,001,400	17 34	900
Ahmednuggur ...	6,828 18	628,056	.....	.....	6,828 18	628,056	28,044 0	1,402,190	217 0	10,840
Bombay	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Belgaum	163,676 37	8,183.850	3,730 6	186,500	164,407 3	8,370,350	130,810 28	6,540,550	1,865 0	93,250
Kandeish	18,304 8	525,625	219,606 2	6,528,068	237,910 10	7,053,693	0 33	.....	436,336 5	14,965,960
Canara	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dharwar	160,014 36	6,885,503	261,942 21	15,991,946	421,987 17	22,877,445	161,719 21	7,118,038	304,688 19	20,061,401
Hyderabad	23,373 4	1,168,650	.....	.....	23,373 4	1,168,650	30,593 38	1,529,650	.....	.....
Kaira	15,403 0	6,653	.....	.....	15,403 0	6,653	11,792 0	7,004	.....	.....
Kurrachee.....	3,763 18	188,150	33 31	1,700	3,797 9	189,850	1,485 36	74,300	80 2	4,000
Kulladghee	278,494 17	13,924,700	3,268 6	163,400	281,762 23	14,088,100	262,275 0	13,113,750	8,823 6	441,150
Poona	5,317 21	1,190,860	.....	.....	5,317 21	1,190,860	31,240 36	2,141,241	.....	.....
Rutnagherry.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sattara	21,554 15	1,077,700	29 33	1,500	21,584 8	1,079,200	44,718 6	2,235,900	.....	.....
Sholapoor	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Shikarpore	28,179 30	1,408,950	.....	.....	28,179 30	1,408,950	22,078 20	1,103,900	.....	.....
Surat	232,866 18	11,643,300	4 12	200	232,870 0	11,643,500	256,143 35	12,807,150	13 36	650
Tanna.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Frontier Upper Sind	2,289 32	114,600	43 20	2,150	2,333 12	116,650	2,289 32	102,012	43 20	933
Grand Total...	1,217,737 23	59,828,549	488,663 11	22,875,608	1,766,400 34	82,698,257	1,203,250 37	59,177,705	752,085 20	35,579,089

Cotton Cultivation, and Estimated Produce, during 1866 *and* 1867.

For the year 1866-67.			Increase in 1867.			Decrease in 1867.				Remarks.
Total.			Indigenous Cotton.			Exotic Cotton.		Indigenous Cotton.		
Acres.		Pounds.	Acres.		Pounds.	Acres.	Pounds.	Acres.	Pounds.	
220,045	26	11,002,300	.....		.....	12 34	650	37,613 17	1,880,650	.....
28,261	0	1,413,030	21,215	22	774,134	217 0	10,840	.....	.....	.....
.....		.....	.....		.....	.....	.....	.....	.....	.....
132,675	28	6,633,800	.....		.....	.....	.....	32,866 9	1,643,300	1,863 6
436,836	88	14,965,960	.....		.....	216,730 3	8,437,892	18,303 15	533,585	.....
.....		.....	.....		.....	.....	.....	.....	.....	.....
466,438	0	27,180,059	170,425	0	238,143	42,745 38	4,069,461	.....	.....	.....
80,593	38	1,529,650	7,220	34	361,000	.....	.....	.....	.....	.....
11,792	0	7,004	.....		.....	.....	.....	3,611 0	.....	.....
1,566	16	78,300	.....		.....	46 29	2,300	2,2 2 22	114,100	.....
271,098	6	13,554,900	.....		.....	5,555 0	277,750	16,219 17	810,950	.....
31,240	36	2,141,241	25,923	15	950,381	.....	.....	.....	.....	.....
.....		.....	.....		.....	.....	.....	.....	.....	29 33 1,450
44,718	6	2,235,900	23,168	81	1,158,150	.....	.....	.....	.....	.....
.....		.....	.....		.....	.....	.....	6,101 10	305,050	.....
22,078	20	1,103,900	.....		.....	9 24	450	.....	.....	.....
256,157	31	12,807,800	23,277	17	1,163,850	.....	.....	.....	.....	.....
.....		.....	.....		.....	.....	.....	.....	12,588	 1,212
2,333	12	102,950	.....		.....					
1,955,336	17	94,756,794	117,843	4	4,640,658	316 13	92,799,813	116,907 10	5,300,223	1,894 39 95,912

801†

Chamberlen W. Walker, Lieut-Colonel,
Acting Inspector-in-Chief, Cotton Department.

F.

COMPARATIVE STATEMENT of the Monthly Expenditure of the Establishment entertained for carrying out the Provisions of the Act IX. of 1863, sanctioned by Government during 1866, and the Estimated Expenditure for 1867 for which sanction is solicited.

Locality.	Designation.	Monthly salary, including every sort of allowance, in 1866.			Monthly salary, including every sort of allowance, in 1867.			Increase.	Decrease.
		Rs.	a.	p.	Rs.	a.	p.	Rs.	Rs.
For the Town and Island of Bombay.	Inspector-in-Chief Cotton Department	2,458	5	4	2,458	5	4		
	Inspector	1,000	0	0	1,000	0	0		
	Ditto.	900	0	0	900	0	0		
	Ditto.	800	0	0	800	0	0		
	9 Sub-Inspectors; 3 on Rupees 150, and 6 on Rs. 100 each.	1,050	0	0	1,050	0	0		
	Office Establishment and Contingent charges	500	0	0	500	0	0		
		6,708	5	4	6,708	5	4	...	...
For Ahmedabad and Kaira Collectorates	Inspector	1,000	0	0	1,000	0	0		
	4 Sub-Inspectors; 2 on Rupees 120, and 2 on Rs. 80, each per month	400	0	0	400	0	0		
	Office Establishment, including Contingent charges	150	0	0	150	0	0		
	Eight Peons for Sub-Inspectors, at Rs. 9 each per month	72	0	0	72	0	0		
		1,622	0	0	1,622	0	0	...	...
For Surat and Broach Collectorates	Inspector	900	0	0	900	0	0		
	4 Sub-Inspectors; 2 on Rupees 120, and 2 on Rupees 80 each	400	0	0	400	0	0		
	2 Preventive Inspectors on Rupees 150 each	300*	0	0	300	0	0		
	Batta to Preventive Inspectors at Rupees 1-8-0 per diem, for eight months	90*	0	0	90	0	0		
	Office Establishment, including Contingent charges	150	0	0	150	0	0		
	3 Boats at Rupees 40 each, 2 Tindals at Rupees 15 each 12 Kullasees at Rupees 12 each, for eight months	254*	0	0	254	0	0		
	Watchers for eight months	140	0	0	140	0	0		
	Eight Peons for Sub-Inspectors	72	0	0	72	0	0		
		2,306	0	0	2,306	0	0	...	...

For Khandeish Collectorate	*Inspector*	900	0	0	900	0	0			
	2 Sub-Inspectors; at Rupees 120 each	240	0	0	240	0	0			
	Office Establishment, including Contingent charges	150	0	0	150	0	0			
	4 Peons for Sub-Inspectors	40	0	0	40	0	0			
		1,330	0	0	1,330	0	0	...		...
For Belgaum, Dharwar, and Kulladghee Collectorates.	Inspector	900	0	0	900	0	0			
	4 Sub-Inspectors; 2 on Rupees 120, and 2 on Rupees 80 each.	400	0	0	.....					
	3 Sub-Inspectors; 2 on Rupees 120, and one on Rs. 80	.....			320	0	0			
	Office Establishment, including Contingent charges	150	0	0	150	0	0			
	8 Peons for Sub-Inspectors	72	0	0	.....					
	6 Ditto Ditto	...			54	0	0			
		1,522	0	0	1,424	0	0	...		98
For Sholapoor, Sattara, Ahmednuggur and Poona Collectorates	Inspector	900	0	0	900	0	0			
	One Sub-Inspector	150	0	0	150	0	0			
	Office Establishment	150	0	0	150	0	0			
	2 Peons for Sub-Inspector	18	0	0	18	0	0			
		1,218	0	0	1,218	0	0	...		...
For Sind Province	Inspectors	700	0	0	700	0	0			
	One Sub-Inspector	150	0	0	150	0	0			
	Office Establishment	150	0	0	150	0	0			
	2 Peons for Sub-Inspector	18	0	0	18	0	0			
		1,018	0	0	1,018	0	0	...		...
For Canara and Rutinagherry Collectorates	Inspector	800	0	0	180	0	0			
	One Sub-Inspector	150	0	0	150	0	0			
	Office Establishment, including Contingent charges	150	0	0	150	0	0			
	2 Peons for Sub-Inspector	18	0	0	18	0	0			
		1,118	0	0	1,118	0	0	...		...
For His Highness the Rubsheo's Territory	Inspector	350	0	0	350	0	0			
	Naique	10	0	0	10	0	0			
	2 Peons	14	0	0	18	0	0			
	Crews and Boats	150	0	0	.....					
	Crews and Boats for eight months	.....			150	0	0			
		524	0	0	528	0	0	4	0	0 ...

CHAMBERLEN W. WALKER, Lieutenant Colonel,
Acting Inspector-in-Chief, Cotton Department.

* As per Government Resolution No. 3067 of 27th August 1866.
† This sum of Rupees 4 was sanctioned in Government Resolution No. 2093 of 14th July 1865, but was omitted by mistake in last report.

No. 116 OF 1867.

Chamber of Commerce, Bombay 12th August 1867.

To the CHIEF SECRETARY TO GOVERNMENT, Bombay.

SIR,—I am directed by the Committee of Management of the Chamber of Commerce to acknowledge receipt of your letter No. 1801 of 1867, dated 11th May, handing Government resolution No. 1799 of same date on the report of the Acting Inspector-in-Chief of the Cotton Frauds Department on the working of the Cotton Frauds' Act during last year (copies of which were subsequently received), and requesting the attention of the Chamber to the points adverted to in paras. 3 and 7 of the Government resolution.

1. In reply I have the honour by desire of the Committee respectfully to state that the whole question of the working of the Act has of late received earnest consideration from the members of the Chamber of Commerce, more especially with reference to Government resolution dated 28th May 1866, when Government, doubting whether the law as it at present stands would permit the application of the fund to "the purchase of improved machinery and to other objects for the general advancement of the "cotton trade," requested the opinion of the Chamber as to the advisability of making an alteration of the law in this respect.

2. The discussions which have taken place have shown that the members of the Chamber are almost unanimously of opinion that the Act has not, in so far as its provisions have been strictly adhered to, been productive of the good to the trade which its framers seem to have expected.

3. It was an act of an altogether exceptional character intended to meet a crisis of a nature unexampled in the history of the cotton trade, and without entering on a discussion of the results of the working of the Act while this exceptional state of matters lasted, the Commmittee respectfully beg to state that they cannot by any means admit the inference drawn by Colonel Walker in para 48 of his report that the improvement in Indian cotton which has admittedly taken place is attributable solely to the working of the Cotton Frauds' Act.

4. While admitting to the full extent the zeal with which the officers of the department have striven to carry out what must have been a difficult and delicate task and giving them credit for having in some instances effected much good to the trade, the members of the Chamber, (as appears from their recorded minutes) are generally of opinion that much of this good has been effected by their acting *ultravires*.

5. The "curious coincidence" alluded to by Colonel Walker is further explained by the fact that during the same period the cotton trade has been deriving very great benefit from the exertions of Government officers, outside the department altogether—such as Mr. Ashburner the Collector of Khandeish to whom too great praise cannot be given; from the opening up of Railway communication into the heart of the cotton districts of the Central Provinces and Goozerat; from the impetus thereby given to the establishment of European agencies at the principal cotton marts of the interior; from the introduction of machinery for the better ginning of cotton, and for full and half pressing in the districts; from the increase of wealth (and it may be added intelligence) among the growers of the cotton and their emancipation from their former state of dependence on the Sowcars; and perhaps above all from the heavy fall which has taken place in the price of cotton since the close of the American war which brings the Indian grower again into competition with the American in a market in which during the early history of the working of the Act the Indian growers virtually enjoyed a monopoly.

6. But the exceptional state of matters which called the Act into existence has passed away, and the question now arises whether it is right or expedient to continue to tax the trade for the maintenance of the present costly system.

7. On this point the Committee express the almost unanimous opinion of the Chamber, when they say that the benefits resulting from the working of the Act in its strict interpretation are not such as to justify the continuance of the tax.

8. In Bombay itself where it was anticipated by the framers of the Act the most beneficial results would be experienced and where Government still considers that for police purposes, that is to say for the purposes of the Act as it stands, the main strength of the department should be located, the Committee have no hesitation in expressing their opinion that the Act has proved a failure.

See para 6 of Government Resolution No. 1799.

9. It would be difficult indeed to point to any instance in which the services of a staff, the local portion of which is maintained at cost of about Rs. 4,500 per mensem, have resulted in any practical good.

10. Returns are furnished and placed on the files of the Chamber, but it does not appear that they are ever referred to, from which the inference is clear that merchants prefer trusting to their own establishment and their own system (good or bad as it may be)

to the ordinary police, and to the law as set forth in the Penal Code to protect themselves in their transactions in preference to the cotton frauds officers.

11. At the same time it is probable that the dread of detection and punishment has operated as a deterrent to fraud in Bombay itself and still more in the Mofussil.

12. Although therefore a considerable section of the Chamber, impressed with the practical inutility of the Act, and believing strongly that it is wrong in principle, desire to see it immediately repealed—the majority of the members appear to be of opinion that it might be attended with danger to do so, but that it may be desirable in the meantime to alter or amend it so as to admit of the establishment being incorporated with that of the Cotton Commissioner, and the fund made available for such purposes as those contemplated in the Government resolution of 28th May 1866.

13. The Act would thus gradually lose its character of police measure and become instead of a Cotton Frauds Act a Cotton Improvement Act.

14. It is believed that a department so formed co-operating with the Collectors and other Government officers interested in promoting the well-being of their respective districts may in the present state of the cotton trade of the world become of great service to Western India.

15. There is no doubt that to a greater or less extent America will soon have resumed her place as India's most formidable competitor in the cotton supply of the world; and it is only in proportion to the extent to which the quality of Indian cotton is maintained and improved that India can hope to hold her own.

16. The result of all that has been done during the last two or three years is most encouraging, though there is yet ample room for further success.

17. Referring to the question as to the expediency of raising the export fee from three to four annas per bale, I am directed respectfully to state that in the opinion of the Committee such a step is unadvisable and altogether unnecessary. They would respectfully remind His Excellency in Council that practically the fall in the price of cotton from about Rupees 600 to Rupees 200 per candy has increased the weight of the tax three-fold and that at the latter rate it amounts to a charge of very nearly one quarter per cent.

18. Even supposing the Act to continue to be administered in its present form, the Committee consider that the present tax is more than ample for the maintenance of a sufficient establishment. They respectfully submit that the present establishment is excessive

and the scale of salaries out of all proportion to the duties. Taking Bombay alone they feel certain that the duties of the department might be efficiently performed by one inspector on say Rupees 500 per month (at which rate of salary many efficient persons could now be got) with moderate establishment. The salaries of the whole department seem to the Committee to be based on a scale too high, and though they would be sorry to see any injustice done to or hardship inflicted on present incumbents—they would urge on Government the undesirableness of maintaining so higly paid an establishment.

19. At all events the Committee hope that if the suggestion above made for an alteration of the law and for the merging of the department into that of the Cotton Commissioner, is adopted by Government, it may be possible taking into consideration the present cost of the Commissioner's department and the expenditure of Government in various ways towards the objects of that department, materially to reduce the present amount of the tax.

20. I am farther to point out that looking to the rate at which the export of cotton from Bombay is proceeding, there is every prospect of the total number of bales on which the tax is leviable considerably exceeding that of last year. The Committee trust Government will take an early opportunity of considering how the trade can be relieved of this impost altogther, as the principle of mulcting the exporter in a sum which is devoted to the improvement of cotton cultivation the profit of which improvement accrues to the grower in the enhanced price he gets for his cotton, is in their humble opinion open to grave objection.

21. Regarding para. 7 of the Government resolution calling the attention of the Chamber to the suggestions on the subject of marking bales, the Committee beg to state that in their opinion the suggestions of the senior inspector are of no practical value; neither in Bombay nor in Liverpool do merchants pay any attention to marks on cotton bales, but judge of cotton entirely from samples drawn from each bale.

22. In reference to this subject the remark of the chief inspector in para. 70 of his report may be calculated to mislead. Any merchant who understands his business is quite capable of detecting Verungaum cotton offered to him whether it comes via Ahmedabad or via Dhollera, but it would appear from the remark itself that ignorant persons are still imposed on in spite of the stamping.

23. In conclusion I am to apologise for discussing at such length many topics not referred to in the paragraphs of the Government resolution to which the attention of the Chamber has been called; but the excuse of the Committee must be the special bearing of these topics on the working of the cotton frauds' act, and the important subject of the improvement of cotton cultivation, and they respectfully trust the suggestions they have taken the liberty of making will receive from His Excellency the Right Hon'ble the Governor in Council early and careful consideration.

I have the honor to be, Sir,

Your most obedient Servant,

JAMES TAYLOR, Secretary.

No. 123 P. of 1867.

REVENUE DEPARTMENT,

Poona, 20th August 1867,

To the SECRETARY TO THE CHAMBER OF COMMERCE, Bombay.

SIR,—I am directed to request that you will be so good as move the Chamber of Commerce to favour Government with an early reply to Mr. Chief Secretary Chapman's letter, No 1801, dated 11th May last, especially as regards the proposal to raise the fee on cotton from three to four annas per bale.

I have the honor to be, Sir,

Your most obedient Servant,

M. J. SHAW STEWART,

Acting Chief Secretary to Government.

No. 120 of 1867.

Bombay Chamber of Commerce,
22nd August 1867.

To M. J. SHAW STEWART, ESQUIRE,
Acting Chief Secretary to Government, Poona

SIR,—I have the honour to acknowledge the receipt of your letter of the 20th inst. received this day, and in reply to inform you that the views of the Chamber on the subject to which you refer were conveyed in a letter forwarded to the Secretariat on the 20th inst. which I trust you will have received ere this comes to hand.

I have the honor to be, Sir,
Your most obedient Servant,
JAMES TAYLOR, Secretary.

APPENDIX D.

ADULTERATION OF SAWGINNED DHARWAR COTTON.

No. 71 of 1867.

BOMBAY CHAMBER OF COMMERCE, 27th May 1867.

W. WALTON, Esq.,
Acting Cotton Commissioner, Dharwar.

SIR,—I am directed by the Committee of Management of the Chamber of Commerce to call your attention to a species of adulteration which appears to be practised in the Dharwar districts with the saw-ginned Dharwar cotton which has the effect of detracting seriously from its value, and otherwise subjecting merchants in Bombay to much trouble and loss.

It appears from representations made to the Chamber by several of the principal merchants who deal in this description of cotton, that almost every Docra of the cotton received in Bombay appears to contain a few pounds of ginning refuse or chi[illegible]. The discovery is only made when the Docras are opened at the presses when sent there for the purpose of being screwed. It is found to be almost impossible entirely to remove this rubbish, and the consequence is that a portion finds its way into most of the screwed bales sent to Europe.

It is reported to the Chamber to be an almost universal practice in all the ginning sheds in the Dharwar districts to return the refuse thrown off in the ginning process into the middle of the cleaned Docras and this is said to be done in order that the ginning establishments may be able to return to the ryots the full weight of cotton received for ginning.

The Committee feel assured it is only necessary to call your attention to this reprehensible practice, for you to use your best endeavours to have it speedily put down.

I have the honour to be, Sir,
Your most obedient Servant,
JAMES TAYLOR,
Secretary.

No. 72 of 1867.

Bombay, Chamber of Commerce, 31st May 1867

To Lieut. Col. C. W. Walker,

Acting Inspector-in-Chief Cotton Frauds Department,

Bombay.

Sir,—I am directed by the Committee of Management of the Chamber of Commerce to forward herewith copy of a letter from the Chamber to the Acting Cotton Commissioner on the subject of the adulteration of Sawginned Dharwar cotton by the introduction of "chip" into the Docras, and to request your attention to the same in as far as the matter may come within the scope of your department.

I have the honour to be, &c.,

(Signed) James Taylor, Secretary.

No. 807 of 1867.

To James Taylor, Esq.,

Secretary Chamber of Commerce, Bombay.

Dharwar, 3rd June 1867.

Sir,—I have the honour to acknowledge receipt of your letter dated 27th ultimo referring to a serious system of adulteration now commonly practiced with Dharwar sawginned cotton.

2. In reply I beg to state that the detection and prevention of adulteration comes more particularly within the duties of the officers of the Cotton Frauds Department; I am to-day forwarding a copy of the letter under reply to the inspector-in-chief Colonel Walker, and I feel certain that gentleman, as well as Mr. Blackwell the inspector for Dharwar, will at once do all that lies in their power to put down the very reprehensible practice complained of by the Chamber.

3. I enclose a copy of my letter No. 808 dated 3rd June 1867 to Colonel Walker on the subject for your information.

4. All the preventive measures that can be carried out by this department and that of the Dharwar factory will at once be made

5. I beg to favour of your conveying my thanks to the Chamber for having brought this practice to notice, and I shall feel obliged by your adding that I shall esteem it a favour if the managing Committee will always address me whenever they consider I can be of any use in furthering the interests of the Bombay cotton trade.

I have the honour to be, &c.,

(Signed) W. WALTON,
Acting Cotton Commissioner.

No. 808 of 1867.

COLONEL C. WALKER,

Inspector-in-Chief, Cotton Department, Bombay.

DHARWAR, 3rd June 1867.

SIR,—I have the honour to forward for your information copy of a letter to my address from James Taylor, Esq., Secretary to the Bombay Chamber of Commerce, dated 27th ultimo, and my reply thereto of to-day's date No. 807.

In addition to the important matter brought to notice in Mr. Taylor's letter, I would take this opportunity of asking the co-operation of your department in inducing the gin owners of the Dharwar districts to keep their saw-gins in better working order than they now do.

About one half of the gins (more or less) in these districts are under Government supervision, but unfortunately there is no inducement beyond self-interest to prevail upon the people to keep them n order.

What I wish to bring about is a system of having all gins in *perfect* working condition before the ginning season commences; this, I have hitherto (from the unwillingness of the owners to incur any expense until it becomes no longer avoidable) been quite unable to accomplish, but I think an improvement might be effected by the co-operation of Mr. Blackwell and his subordinates; at present the people all wait until the crop is picked and cleaning cotton commences; the result is that the Dharwar factory establishments are overwhelmed with work for about four months and the rest of the year have comparatively little to do.

I now have a greater number of men (in fact all the workmen that can be got hold of) employed in the districts than have ever before been engaged at one time, have this season opened two more, repairing factories and still this is not enough.

Complaints that many gins are out of order are common and the complaint is a well-founded one; much of the cotton is stated to be offered for sale in a "leafy, cut, and of fluffy state;" with the former the gin has nothing to do, that is purely the fault of bad picking; for the latter the sawgin is undoubtedly somewhat to blame; it should not however be forgotten that much of the crop of this last season's Dharwar acclimatized American cotton is of a weaker staple than usual, and the weak staple is less able to bear the sawgin than cotton of the usual Dharwar strength.

The assistance that I would ask from the Inspection Department (in addition to that named in my above 4th paragraph) is a weekly statement from Mr. Blackwell and his subordinates of all the gins they have found during the period out of order, with name of owner, village, and other particulars; should you approve of the scheme I shall be glad to draw up and forward you a simple form of return.

Referring to my above 3rd paragraph I beg to add that a large and increasing number of sawgins which have been bought from private dealers, &c. are not under the supervision of the Dharwar factory department, with these latter the case is more difficult, but I shall always be glad to co-operate with your department in getting the owners of such machines to avail themselves of the services of the Dharwar factory and its branches in putting their gins into proper order for cleaning cotton in a fit condition for the Bombay market.

I have the honour to be, &c.,
(Signed) W. WALTON,
Acting Cotton Commissioner.

(True Copy.)
W. WALTON,
Acting Cotton Commissioner.

No. 854 of 1867.

To James Taylor, Esq.,

Secretary to the Chamber of Commerce, Bombay.

Dharwar 10th June 1867.

Sir,—Referring to your letter dated 27th ultimo, I have the honor to forward you a copy of a communication I have received from the Collector of Dharwar No. 975 dated 7th instant, I have seen Mr. Reid regarding your representation and feel certain that gentleman will aid all that lies in his power towards putting a stop to the serious adulteration of Dharwar cotton complained of by the Chamber.

I have the honor to be, &c.,

(Signed) W. Walton,
Acting Cotton Commissioner.

No. 975 of 1867.

From the Collector of Dharwar.

To W. Walton, Esq.,
Acting Cotton Commissioner,
Dharwar Collector's Office, 7th June 1867.

Sir,—With reference to your letter No. 810 dated 3rd instant, forwarding copy of a letter to your address from the Secretary to the Bombay Chamber of Commerce complaining of the prevalence of the mixture of ginning refuse or chip in the present season's bales of sawginned American cotton received from Dharwar, I have the honor to inform you that the matter had already been brought to my notice by Colonel Walker the acting inspector-in-chief of cotton, and I am now in communication with him as to the best means of preventing the repetition of a practice so detrimental to the interests of the trade.

I have, &c.

(Signed) L. Reid,
Collector.

(True Copy)

W. Walton,
Acting Cotton Commissioner.

No. 87 of 1867.

Bombay Chamber of Commerce, 17th June 1867.

W. WALTON, Esq.

Acting Cotton Commissioner, Dharwar.

SIR,—I have the honor to acknowledge the receipt of your two letters Nos. 807 and 854 dated respectively 3rd and 10th instant, and in reply I am directed by the Committee of Management of the Chamber to express their acknowledgments for the prompt manner in which you have attended to their wishes in respect to the matter of adulteration in sawginned Dharwar cotton. The Committee had previously directed the attention of the acting inspector-in-chief Cotton Frauds Department to the subject, and it is to be hoped that through your united exertions—a stop may be put to the frauds complained of.

I have the honor to be, &c.,

(Signed) JAMES TAYLOR,

Secretary.

No. 233 of 1867.

From the Acting Inspector-in-Chief, Cotton Department,

To J. TAYLOR, Esq.,

Secretary Chamber of Commerce, Bombay.

POONA, 10th June 1867.

SIR,—In acknowledging receipt of your letter dated 31st May and accompaniments, I have the honor to inform you that the subject of the introduction of chip into Dharwar sawginned cotton was, on the report of Mr. Wilkinson, senior inspector in Bombay, lately brought to the notice of the cotton inspector at Dharwar who was at once directed by me to use every endeavour to put an end to the very objectionable practice.

2. As the "chip" put into the Docra is of the same variety of cotton as that of which the Docra is composed, there may be a difficulty in obtaining convictions in cases taken up, but I hope the issue which I have suggested, of proclamations pointing out to all concerned the injury which the practice must bring on the cotton trade of Dharwar will have the desired effect.

3. I take the opportunity to remark that the Dharwar American cotton of this season is extraordinarily leafy, caused, I am informed by the officer in charge of the cotton Commissioner's office, by the crop having ripened during native holidays when for above a fortnight it was impossible to persuade the ryots to work in their fields and save the crop before it fell to the ground where it was injured.

I have the honor to be, &c.,

(Signed) C. WALKER, Lieut. Col.,
Acting Inspector-in-Chief, C.D.,

No. 86 OF 1867.

Bombay Chamber of Commerce, 17th June 1867.

To Lieutenant-Colonel WALKER

Acting Inspector-in-Chief Cotton Department, Poona.

SIR,—I am directed by the Committee of Management of the Chamber of Commerce to acknowledge the receipt of your letter of 10th instant on the subject of chip in Dharwar sawginned cotton and to tender their acknowledgments for your so promptly turning the attention of your department to the matter, with a view to putting a stop to this most objectionable practice. The Committee are farther obliged by your drawing their attention to the circumstance, that the Dharwar cotton of the present season is reported by the Acting Cotton Commissioner to be unusually leafy, said to be caused by the crop having ripened during native holidays, when for above a fortnight it was impossible to persuade the ryots to work and save the crop from injury.

I have the honor to be, &c.,

(Signed) JAMES TAYLOR,
Secretary.

APPENDIX E.

ADULTERATION OF COTTON IN UPPER INDIA.

No. 2154 of 1867.

REVENUE DEPARTMENT,

Bombay Castle, 5th June 1867.

To the SECRETARY to the CHAMBER OF COMMERCE, Bombay.

SIR,—I am directed by the Right Honourable the Governor in Council to forward herewith, for the information of the Chamber, an extract from the proceedings of this Government No. 2152 of this day's date on the subject of the adulteration of cotton in Upper India, and to request the favour of their considering the letter of the Secretary to the Financial Commissioner of the Punjaub in replying to the resolution of this Government No. 1983 of the 27th ultimo.

I have the honour to be, &c.,

(Signed) H. E. JACOMBE,
Under-Secretary to Government.

No. 2152.

EXTRACT FROM THE PROCEEDINGS OF THE GOVERNMENT OF BOMBAY, IN THE REVENUE DEPARTMENT, DATED 5TH JUNE 1867.

Read the following papers :—

Letter from W. Walton, Esq., Acting Cotton Commissioner, to the Honorable M. J. M. Shaw Stewart, Acting Chief Secretary Her Majesty's Government, Bombay, No 734, dated 16th May 1867.

I have the honour to submit herewith a letter (in original) to my address No. 2034, dated 1st instant, from J. A. E. Miller, Esq., Secretary to the Financial Commissioner of the Punjaub, on the subject of adulteration of cotton in Upper India.

2. I have considered the question of advising the introduction or not of the Bombay Cotton Frauds Act into other parts of India, too important a matter for me to express a direct opinion upon without bringing the whole correspondence to the notice of Government.

3. There cannot be any question whatever regarding the great good that has accrued to the Bombay cotton trade by the introduction of Act IX. of 1863, and I am respectfully of opinion that a judicious and temperate administration of that Act would do much good to the Indian cotton trade wherever it may be brought into operation

4. I should, however, here add my belief that the cotton frauds officers have done as much, if not more benefit to cotton by their endeavours for improving the cultivation and preparation of the staple than by actually carrying out provisions for which the Frauds Act was especially passed, but it should be noted that Act IX. gives these officers a power, position and status, for doing good in the way above referred to, that they could not possibly possess without the authority vested in them by the legislative enactment.

5. The description given by Mr Feilman in the 2nd paragraph of the enclosed letter of the practices of adulteration in Upper India would be but a moderate sketch of some of the practices in force in this Presidency before Act IX. became law; such proceedings have, however, now become very rare.

6. Referring to Mr. Miller's 4th paragraph, I think that Colonel Walker will be able to show that his Executive officers are principally employed where there are no cotton presses; the particular sections of the Act as regards press companies were brought in more as regards Bombay for the present, where large companies for pressing were both established and projected, and the Mofussil in the future, when up-country pressing shall have become what it eventually must be the custom of the trade.

7. Any improvement that may be effected with Punjaub cotton will be an indirect gain to Bombay and Sind, as the principal portion of the staple finds its way to Kurrachee, and in order that the Financial Commissioner may have the benefit of full comments on the subject, I would respectfully suggest, that the opinions of the Commissioner in Sind, the Kurrachee Chamber * of Commerce, and Colonel Walker, inspector-

* The Chamber should be asked to report particularly on Mr. Miller's 6th paragraph regarding the state in which cotton reaches Kurrachee.

in-chief cotton department be taken on this correspondence before an answer is returned to Lahore.

Letter from J. A. E. Miller, Esq., Secretary to the Financial Commissioner of the Punjaub, to the cotton Commissioner, Dharwar, No. 2034, dated 1st May 1867.

The attention of the Financial Commissioner has recently been drawn to the subject of the adulteration of cotton in Upper India.

2. In consequence of representations made by Messrs. Cohen, Feilman, and Co., of Agra, the Board of Revenue, North-West Provinces, have issued a circular to the Revenue authorities in those Provinces, calling for a report as to whether any special measures are required to prevent the adulteration of cotton by native dealers. Mr. Feilman states that "it is their custom to enclose rubbish of various descriptions, especially cotton in its raw state, with the seeds, and old cotton taken from the inside of old Rezais, old clothing, and extraneous matter of other kinds, in the middle of the bales, concealing it in such a manner as to prevent detection without the particular precaution of examining every bale in half a dozen different places." He concludes with a recommendation that a Cotton Frauds Act, similar to the Bombay Act, on the subject be introduced in the North-West Provinces.

3. If the same evils exist in the Punjaub, it may be a question whether some similar remedy should not be sought for.

4. It appears from the last administration report of the Bombay Government that the Cotton Frauds Act has been attended with beneficial results in that Presidency, but on examining the Act the Financial Commissioner finds that a system of inspection and of cotton presses are inseparably connected with it, and he is disposed to think that, where these agencies do not exist, it would be very difficult to enforce any enactment directed against the adulteration of cotton.

5. In the Punjaub no such inspecting agency is at present available, and cotton presses are rare.

6. The Financial Commissioner has heard that much of the cotton sent down the Indus from the Punjaub every year is adulterated, and is anxious to learn the exact truth on this point. Native growers and dealers when left to themselves very possibly

Note—The Government of the Punjaub have been addressed.

take advantage of the difficulty that exists in preventing frauds of this kind, but the practice must tend to depreciate the value of the cotton, and anything that will assist in repressing it will be a great benefit to the trade generally.

7. The Financial Commissioner will be glad to be favoured with an expression of your views on the subject.

RESOLUTION.—Copy of Mr. Walton's letter should be sent to the Government of the Punjab, for communication to the Financial Commissioner, together with copies of any recent papers of interest regarding the operation of the cotton frauds department.

2. It will be observed that the cotton frauds department operates in three ways: (1) as a detective police for preventing adulteration and false packing at the place of production; (2) by a system of inspection to prevent impure cotton being compressed and exported to Europe; and (3) by the adoption of measures for improving the culture of cotton. The first and last of these measures can be applied to the cotton cultivation in the Punjaub only through a local machinery, whereas the inspection at the presses, carried out by the Bombay cotton frauds department, must affect all cotton that is brought for export to Europe, whether it be produced in the Bombay Presidency or beyond its limits.

3. Copies of these papers should be sent to the Chamber of Commerce, Bombay, and (through the Commissioner) to the Chamber of Commerce at Kurrachee; and these bodies should be requested to consider this letter of the Financial Commissioner in replying to the reference made under the resolution of this Government No. 1983 dated the 27th ultimo. Their replies will be forwarded to the Government of the Punjaub.

Ordered that copies of the above be forwarded to—

W. WALTON, ESQ., Acting Cotton Commissioner,

The COMMISSIONER in SIND.

The CHAMBER of COMMERCE, Bombay (by letter).

(Signed) M. J. M. SHAW STEWART,
Acting Chief Secretary to Government.

No. 94 of 1867.

CHAMBER OF COMMERCE, BOMBAY, 29th June 1867.

To the UNDER-SECRETARY to Government,
Revenue Department, Bombay.

SIR,—I am directed by the Committee of Management of the Chamber of Commerce to acknowledge the receipt of your letter No. 2154 of 1867 dated 5th instant together with the extract from the proceedings of Government of same date to which it refers, in which the opinion of the Chamber is requested on a letter from the Secretary to the Financial Commissioner of the Punjab, detailing certain forms of adulteration of Punjab cotton by native dealers and inquiring as to the expediency of endeavouring to prevent those practices by an enactment similar to the Bombay Cotton Frauds Act.

In reply I am to state for the information of the Right Hon'ble the Governor in Council, the Committee are respectfully of opinion that an enactment framed on the principle of the Bombay Cotton Frauds Act, would be a measure of very questionable policy, and would be no remedy against the system of adulteration said to prevail in the North West Provinces and the Punjab.

The most that can be said in favour of the Bombay Cotton Frauds Act is that it was a well meant attempt in exceptional legislation intended to meet the exigencies of a very exceptional state of things.

When every available bale of cotton in Western India in 1862 was sent forward from all ports of the interior where it was grown to Bombay for export, to meet the wants of the manufacturers in England, there was of course much inferior cotton amongst it, and a good deal of adulteration in a very gross form. An exceptional measure was passed in haste to grapple with an exceptional state of things, which however was passing away ere the Act which was passed to check it acquired the force of law, and the state of affairs so much complained of came to an end with the American crisis that had so large an influence in producing it.

The "beneficial results" which the last Bombay administration report attributes to the Cotton Frauds Act, have in the opinion of the Committee been caused rather by the judicious application of the machinery called into existence by the Act, to purposes connected with the improvement of cotton, a matter not contemplated by the terms of the Act.

The machinery of the Act in so far as it has been applied to detect frauds, and punish adulteration, has been almost inoperative.

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" A system of inspection and of cotton presses are inseperably connected" with the Bombay Act, and in the opinion of the Committee, the Financial Commissioner of the Punjab is right in his apprehension that " where these agencies do not exist, it would be very difficult to enforce any enactment directed against the adulteration of cotton,"—as it has been found difficult to enforce the enactment in Bombay where these agencies do exist.

In the opinion of the Committee the provisions of the Penal Code amply provide for the punishment of persons found guilty of adulterating cotton in the manner indicated in Mr. Secretary Miller's letter; but much might be done for the improvement of the cotton grown in the Punjab and North West Provinces by the introduction of a cotton improvement department on a somewhat similar principle to the experiments of this character initiated by the Government of Bombay and by the late Commissioner for the Central Provinces of India.

I have the honour to be, &c.,

(Signed) JAMES TAYLOR, Secretary.

APPENDIX F.

IMPROVEMENT OF COTTON CULTIVATION.

No. 3552 of 1866.

Revenue Department,
Bombay Castle, 5th October 1866.

To the Secretary to the Chamber of Commerce, Bombay.

Sir,—I am directed by His Excellency the Governor in Council to forward, for the information of the Chamber, a copy of the resolution of Government of this date, No. 3557 and of the papers therein referred to, and to request the favour of their giving Mr. Rivett-Carnac, Cotton Commissioner for the Central Provinces and Berar, every information and all the assistance in their power in the prosecution of the objects with which he has been instructed to visit the cotton producing districts of this Presidency.

I have, &c.,
(Signed) J. King,
Acting Under-Secretary to Government.

No. 3551.

Revenue Department.
Bombay Castle, 5th October 1866.

Resolution of Government.

The several Collectors* should be furnished, through the Revenue Commissioners, with copies of the Government resolution of the 18th ultimo, No. 3305, and of its accompaniment, for their information and guidance.

* Except the Collectors of Dharwar and Khandeish, who have already been addressed.

2. A copy should also be sent to the Chamber of Commerce, who should be requested to have the goodness to afford Mr. Rivett-Carnac all the assistance in their power.

3. Transcripts of this resolution, and of the one herein quoted, to be furnished to Mr. Rivett-Carnac for his information.

(Signed) J. KING,
For Chief Secretary to Government.

To

The REVENUE COMMISSIONER N. D., } With copies of Resolution
The REVENUE COMMISSIONER S. D. } No. 3305, of the 18th ult., and of its accompaniment.

The CHAMBER OF COMMERCE

H. RIVETT-CARNAC, ESQ., Cotton Commissioner, Central Provinces and Berar.

Cotton.

No. 3305.

REVENUE DEPARTMENT.

Bombay Castle, 18th September 1866.

Letter from the Secretary to the Chief Commissioner, Central Provinces, No. 2928-278, dated 5th September 1866—Forwarding copy of a letter of instructions addressed to Mr. J. H. Rivett-Carnac, regarding the duties of his office of Cotton Commissioner for the Central Provinces and Berar, and requesting the permission of this Government to that officer visiting the Dharwar and Khandeish Collectorates in the manner proposed.

RESOLUTION—Mr. Walton, in charge of the office of Cotton Commissioner, and the Collectors of Dharwar and Khandeish, should be furnished with copies of the letter of instructions, and directed to give Mr. J. H. Rivett-Carnac every information and all the assistance in their power.

2. The Chief Commissioner, Central Provinces, to be informed of the issue of these orders.

(Signed) J. KING,
For Chief Secretary to Government.

To

W. Walton, Esq., in charge office of Cotton Commissioner,
The Collector of Dharwar,
The Collector of Khandeish.

No. 2864—272.

To J. H. Rivett-Carnac, Esquire,
Cotton Commissioner,
Central Provinces and Berar.

Sir,—In continuation of my letter marginally noted, I am now directed to communicate the following general instructions regarding the duties of the new office which you are to take up on the 1st proximo.

No. 2636, of the 10th instant.

2. Your work will, according to the terms of your appointment, be in Berar, as well as in the Central Provinces. You already possess much acquaintance with the chief cotton fields and the cotton trade of these Provinces; so you will take a very early opportunity of visiting the Berar cotton country, and acquainting yourself with the state of cotton culture and of cotton trade there. The four cotton tracts to which your attention will be mainly directed are—

The Berar Valley.	The Nerbudda Valley.
The Wurda Valley.	The Mahanuddy Valley.

3. You already have read the memorandum on the cotton country of Nagpore recorded by Doctor Forbes, the Cotton Commissioner of Bombay. That paper and the Chief Commissioner's Minute thereon indicate the main points to which your early attention should be directed. Many matters connected with cotton culture and the preparation of the staple for market are there adverted to. Stress is laid on the need for improvement in the processes of selecting seed, ploughing, manuring, weeding, picking, packing for local marts, warehousing, cleaning or ginning, pressing or packing for export.

4. The improvement of cotton culture generally, the introduction of approved foreign seed, and the extension of good acclimatized seed, are of very great importance. But it is apprehended that you will not, by reason of the great extent of country over which your operations are to reach, be able yourself to direct any specific operations of this sort. You will have much opportunity for giving advice to District officers; for procuring them samples of seed for general introduction, or for special experiment, and you will be a channel whereby the experience gained in one part of the country may be made available to all officers interested in cotton culture. But, for the present at any rate, you will not be able personally to undertake experiments in cotton cultivation.

5. The primary object is, of course, the introduction of foreign staples, or the improvement of indigenuous staples. You are already aware of the great results which have in this respect been obtained of late years in Dharwar. The Chief Commissioner thinks that your very first proceeding should be to visit Dharwar, and learn on the spot all that has been done there, with a view to attempting to do the same in Central India. On your way to and from Dharwar you will pass through Kandeish, where similar success seems of late to have been attained. The Bombay Government will be solicited to permit your visit to the above named districts, and to afford you facility for practically instructing yourself.

6. The next most important object will be to direct your attention to the treatment which cotton receives when it reaches the local marts and while it is being packed for export. The recently published official papers show what has been done towards improving the cotton markets (gunj) at Hingunghaut and other places in the Wurdah District. The prosecution and extension of measures like those will doubtless occupy your early attention. You can learn what appliances and improvements are in use at the more advanced cotton tracts of Dharwar and Kandeish when you visit those districts in the manner above directed. You will then see what has been done there by Government agency or by private parties for bettering the old Native methods of cleaning, weighing, warehousing, pressing, packing, and roping cotton for export.

Supplement to *Central Provinces' Gazette* for 1866, page 99.

7. When you have satisfied yourself as to what are, under all circumstances, the best methods, and what will be the fittest measures for bringing those methods into common use, whether in respect to the culture of the staple or its preparation for market, you should give the officers of cotton districts the benefit of your experience, and also report your views to the Chief Commissioner for publication in the local Gazette.

8. Another important question which should occupy your attention is the practice of adulterating cotton. As you are aware, there are two ways of adulterating cotton—the coarser and the finer. The coarser way, of mixing foreign substances, seems to have been checked in Bombay; while here it never has existed. But the finer way, that is mixing inferior with superior staples, has always existed here, and recent statistics show that it is probably going on now worse than ever. The correspondence which has recently passed on this subject and on the expediency of en-

acting for the Central Provinces and for the adjoining cotton tracts a law, somewhat similar to the Bombay Cotton Fraud Act, has been sent for your perusal. You will perhaps be able to devise, in concert with Bombay exporting houses and local traders, some scheme for testing and stamping all cotton packages which are despatched from the recognized marts. If once the trade appreciates and accepts a mark of this kind, the Inspector or Bazar Superintendent in charge of each cotton gunj will be able to insist on good, well-cleaned, unmixed cotton being brought to his scales The influence thus brought to bear upon the cotton growers through the traders and the cotton markets will secure the adoption of improved methods of growing, cleaning, and carrying to market, more surely than any instruction or precept could ever do.

9. In all your enquiries you will doubtless be careful to ascertain what are the qualities essential to a good staple, and which of the varieties, foreign or Indian, possesses most or least of those qualities. For instance, length and strength and fineness are perhaps the desiderata in the fibre. It may be that the Dharwar New Orleans possesses more length and strength than fineness, or that the Hinguughaut indigenous fibre possesses fineness, with some length, but less strength, and so on. Again, if a variety has strength it will stand the saw-gin, which a finer fibre would not or some varieties may be suited to a particular kind of machinery and some varieties to another, and so on. By collating all these points, you will be able to decide which are the varieties in the propagation of which most pains should be taken.

10. In a separate communication the Chief Commissioner has already directed that you should obtain and peruse publications, periodical or occasional, which may bear on cotton culture, or on cotton trade. He will always be glad to receive from you any suggestions which such publications may prompt you to make.

11. With respect to the locality and constitution of your office, I am to observe that the Chief Commissioner is prepared to approve of your making your head-quarters at Nagpore, if, on experience, you should find that the most suitable arrangement. For the present, until your requirements are known, and permanent sanction obtained, you are authorized to maintain an office establishment at the rates of pay marginally noted. When members of our establishment accompany you on your tours, they will draw travelling allowances

1 English Clerk	Rs.	150
1 Copyist	,,	50
1 Vernacular Clerk	,,	50
1 Duftree	,,	10
1 Tindgl	,,	7
4 Chuprassies, on Rupees 6 each	,,	24

under the usual rules. The Chief Commissioner considers that your Head Clerk should be competent to prepare and arrange statistics, to make ordinary *precis* of facts, reports, and the like. Now that the Wurdah Settlement is closed, the Settlement Commissioner will be requested to authorize your transferring the camp equipage, furniture, library, and the like, of the Wurdah Settlement Department to the Cotton Commissioner's Office.

12. You should leave Nagpore for Berar and the Bombay cotton tracts as soon as may be convenient, in order that you may be able to return to Hingunghaut and the Wurdah and Berar cotton fields before this season's crop is ready for picking. You will doubtless be able to collect and bring to the Jubbulpore Exhibition samples of Indian and foreign cottons, and perhaps also models or specimens of improved cotton machinery. You will then have opportunity of meeting the landholders of the cotton-growing districts of the Nerbudda Valley.

13. When leaving your head quarters for prolonged tours, you should intimate, for the Chief Commissioner's information, the date of your departure, and the probable period of your absence. During the next season you may not be able to visit the Nerbudda and Mahanuddy cotton fields in detail. But you will be able to afford Government officers in those tracts information and advice, while you devote your attention chiefly to the more important cotton fields of Berar and the Wurdah Valley.

14. You will have perceived that these instructions are of a general character. So far as they may be special, they refer to the Central Provinces only. As regards Berar you will, of course, apply for instruction to the Resident at Hyderabad, to whom a copy of this despatch will be forwarded.

15. Lastly, Mr. Temple directs me to express his hope that you will exercise such skill, and perseverance, and thoughtfulness, as may be the means of teaching the Natives to cultivate and prepare their cotton better than heretofore. That result must be difficult, perhaps even long, of accomplishment. If accomplished, it will augment the resources of the country, and promote the moral and material interests derivable therefrom.

I have the honor to be, &c.,

(Signed) C. BERNARD.

Secy. to the Chief Commissioner, Central Provinces.

Dated Nagpore, the 30th August 1866.

No. 214 of 1866.

To the Under-Secretary to Government Revenue Department,
Bombay.

Sir,—I am directed by the Committee of Management of the Chamber of Commerce to acknowledge the receipt of your letter of the 5th instant forwarding copy of Government Resolution No. 3551, with accompanying papers referring to the appointment of Mr. Rivett-Carnac as Cotton Commissioner for the Central Provinces and Berar.

In reply I am to state that this Chamber views with satisfaction the appointment of Mr. Rivett-Carnac to the office of Cotton Commissioner for the important cotton districts above mentioned, and it will afford the members much pleasure to co-operate with him and to render him all the assistance in their power in carrying out the objects contemplated by the Chief Commissioner of the Central Provinces as explained in the Secretary's letter of 30th August last.

I have, &c.

(Signed) James Taylor,
Secretary.

Bombay Chamber of Commerce, 22nd October 1866.

No. 652 of 1866.

To the Secretary to the Chamber of Commerce, Bombay,

Collector's Office, Ahmedabad,
3rd November 1866.

Sir,—I beg to forward you by banghy-dak a small sample of cotton grown this season from Egyptian seed by Mr. Alfred Whittle at Veerungaum. The seed was sown in July and the plants were treated in exactly the same way as the indigenous cotton plants.

2. I should be obliged by your submitting this sample to the Chamber and favouring me with the opinion formed of its quality.

I have, &c.

(Signed) J. E. Oliphant, Collector.

No. 231 of 1866.

Bombay, 12th November 1866.

J. E. Oliphant, Esq., Collector, Ahmedabad.

Sir,—I have to acknowledge the receipt of your letter of 3rd instant, together with the sample of Cotton to which it refers which was duly submitted to the Committee of the Chamber of Commerce for their opinion and report at their last meeting.

In reply I am now directed to inform you that the sample in question said to have been grown from Egyptian seed—is considered good is colour but the staple in weak and irregular. You do not mention how the cotton was grown, whether in a field and cultivated as cotton is usually grown in Guzerat and to what extent or merely as a sample of Garden cultivation. It is of importance to give particulars on these points as the Committee are of opinion that reports given on samples of mere garden cultivation are apt to mislead.

I have, &c.

(Signed) James Taylor,

Secretary.

No. 716 of 1866.

Ahmedabad Collector's Camp, Rukhyal, 11th December 1866.

To James Taylor, Esq.,

Secretary to the Chamber of Commerce, Bombay.

Sir,—Adverting to that portion of your letter, dated 12th November last, to my address in which you write as below :—

"You do not mention how the cotton was grown, whether in a "field and cultivated as cotton is usually grown in Goozerat, or "merely as a sample of garden cultivation."

I beg to call your attention to the following passage in my No. 652 dated 3rd November last

"The seed was sown in July, and the plants were treated in "exactly the same way as the indigenous cotton plants."

By which was meant that *it was grown in a field and cultivated as cotton is usually grown in Goozerat.*

I have, &c.

(Signed) J. E. Oliphant, Collector.

No. 731 of 1866.

Ahmedabad Collector's Office,
19th December 1866.

To the Secretary to the Chamber of Commerce,
Bombay.

SIR,—I beg to forward you by Banghy dak, two samples of cotton, one grown from Egyptian seed and the other from acclimatized new Orleans, together with an extract of a letter from the grower, Mr. Whittle at Veerungaum to my address.

2. I should be obliged by your submitting these samples to the Chamber and favouring me with the opinion formed of their qualities.

I have, &c.

(Signed) J. E. OLIPHANT, Collector.

Extract from a letter from Mr. Whittle at Veerungaum dated the 18th December 1866 to the Collector of Ahmedabad.

"I believe the Egyptian seed cotton to be equal if not superior "to much of the cotton shipped from Egypt itself and the "Dharwar seed cotton will compare favourably with Hinguughats."

"Both cottons were grown on open land, the seed was sown "last July and the plants carelessly attended to in the orthodox "native fashion."

"At present it is impossible to say what weight of cotton any "given quantity of land will yield, as flowering has not yet "ceased."

(True Extract,)
J. E. OLIPHANT, Collector.

No. 1 of 1867.

Bombay Chamber of Commerce, 2nd January 1867.

J. E. OLIPHANT Esq., Collector, Ahmedabad.

SIR,—I have the honour to acknowledge the receipt of your letter No. 731 dated 19th ultimo, together with the samples of cotton therein advised which were duly submitted to the Committee of the Chamber at their last meeting.

In reply I am directed to inform you that the sample grown from Egyptian seed—is considered in colour about the same as the average of Egyptian cotton. The staple is long and regular and moderately fine and strong but mixed with waste. The class is "fully good fair." The sample is the finest that has been submitted to the Chamber of any cotton grown in Western India from Egyptian seed. If cotton equal to the quality of the sample could be grown in any quantity it would have a valuable influence on the improvement of our cotton cultivation.

2. The sample from acclimatized New Orleans seed, is of good colour, fair staple but rather weak, clean, and considered about equal to the best Oomrawuttee.

I have, &c.

(Signed) JAMES TAYLOR,
Secretary.

No. 2509 of 1866.

Khandeish Collector's Camp, Chalcesgaum,
22nd December 1866.

To the Secretary to the Chamber of Commerce, Bombay.

SIR,—I have the honor to forward eight samples of cotton grown from Hingunghat seed in eight Talookas of Khandeish. Eight samples of New Orleans cotton grown from seed acclimatized in Hingunghat. Eight samples of Dharwar cotton grown in Khandeish. Eight samples of Egyptian cotton grown in Khandeish,—one of cotton grown in Khandeish from seed imported last year from Oomrawuttee in Berar. The whole of the cotton crop of Khandeish is now of this character. The cotton which has for so many years given a deservedly bad name to the Khandeish crop has been exterminated, and its place has been taken by cotton of which the bag No. 1 is a sample, I have sent separate samples of Hingunghat cotton for each of the cotton growing Talookas, because my object is to discover from your report, how far each Talooka is suited to this kind of cotton, but the seed from which it was grown was the same, and it has been grown by the cultivators in their own way in order to test its suitability for extensive field cultivation with no more care or capital than is bestowed on the

ordinary crop. I shall feel obliged by your informing me of the quality of these several samples of cotton and of their relative value per candy in Bombay. It will depend upon your report whether any further steps are taken to introduce Hingunghat cotton into Khandeish, and I beg for an early reply to this reference, in order that, in the event of its being decided to introduce the new seeds measures may be immediately taken to procure it in time for next season's crop. Five hundred and fifty acres of Hingunghat seed have been planted in eight Talookas of Khandeish in the past season, and their produce is now in the market.

I have, &c.

(Signed) L. R. ASHBURNER, Collector.

No. 3 of 1867.

Bombay, 18th January 1867.

To L R. ASHBURNER, Esq., Collector Khandeish.

SIR,—I have to acknowledge the receipt of your letter of the 22nd ultimo, advising the despatch to the address of the Chamber of sundry samples of several varieties of cotton grown in Khandeish on which you request to be favoured with the opinion of the Committee.

The samples were safely received and in due course submitted to the Committee of Management for their opinion and report, which owing to unavoidable circumstances, I regret it has not been in my power to lay before you at an earlier date.

I have now, by direction of the committee, the honour to enclose herewith a report made after a careful examination of all the samples that have been laid before them, which I trust you will find sufficiently full and explicit to be of use to you on the important points indicated in your letter under acknowledgment.

The committee are of opinion that the experiments from Hingunghat seed are on the whole of a very successful character and of much promise for the future.

The experiments with Egyptian seed also appear to have done well.

Those from New Orleans seed acclimatized in Hingunghat are rather a failure, and the same remark applies to the experiments made with the Dharwar acclimatized New Orleans seed.

I am directed to remark that all the samples forwarded were too small, some so small that an opinion could not be given, it is difficult to come to a fair conclusion without seeing samples in larger bulk.

Moreover the samples were all more or less irregular in respect to the character of the staple, and the Committee gave their opinion on some of them, with not a little of hesitation and reluctance in consequence.

In conclusion the Committee desire me to express their acknowledgments for the services you have already rendered to the cause of improved cotton cultivation in the province of Khandeish, and they trust you will have the satisfaction of shortly seeing your labours crowned with complete success.

I have, &c.

(Signed) JAMES TAYLOR,
Secretary.

Samples of cotton grown from Hingunghaut seed in Talookas of Khandeish received at the Bombay Chamber of Commerce from L. R. Ashburner, Esq., Collector, for examination and report 17th January 1867.

1.	Cotton grown in Khandeish from Hingunghaut seed Talooka Sowda	Very much the same as Hingunghaut but barely so long in staple value about same as Hingunghaut.
2.	Cotton grown in Khandeish from Hingunghaut seed Talooka Roweree	Much the same as No. 1.
3.	Cotton grown in Khandeish from Hingunghaut seed Talooka Phalneir.	Not so well cleaned, nor so good in color. Value about same as Oomrawuttee.
4.	Cotton grown in Khandeish from Hingunghaut seed Talooka Bhurgaum.	Much inferior to last sample, leafy and badly cleaned, staple irregular and apparently mixed with the old indigenous Khandeish cotton.
5.	Cotton grown in Khandeish from Hingunghaut seed Talooka Jamnair.	Good color and well cleaned, staple irregular, but generally weaker than Nos. 1 and 2. Value about same as Oomrawuttee.
6.	Cotton grown in Khandeish from Hingunghaut seed Talooka Vurdall.	Badly cleaned, short and weak in staple, not better than No. 4.

Samples of New Orleans cotton grown from seed acclimatized in Hingunghaut.

1.	Cotton grown in Khandeish from New Orleans seed acclimatized in Hingunghat Talooka Ervindole.	Color rather yellowish, staple fair length but weak, decidedly inferior to Oomrawuttee.
2.	Cotton grown in Khandeish from new Orleans seed acclimatized in Hingunghaut, Talkooka Baglan.	This sample received in Kuppas the committee decline to express an opinion.
3.	Cotton grown in Khandeish from New Orleans seed acclimatized in Hingunghat Talooka Pimpulnir.	Badly cleaned, short and weak in staple, altogether an inferior kind.
4.	Cotton grown in Khandeish from New Orleans seed acclimatized in Hingunghat Talooka Thalneir.	Better cleaned, fair color but otherwise not better than No. 3.
5.	Cotton grown in Khandeish from New Orleans seed acclimatized in Hingunghat Talooka Dhoolia.	Well cleaned, fair staple, but not very strong, worth about same as Oomrawuttee.
6.	Cotton grown in Khandeish from New Orleans seed acclimatized in Hingunghaut Talooka Bhargaum.	Badly cleaned, much mixed, staple being partly almost rotten other parts strong.
7.	Cotton grown in Khandeish from New Orleans seed acclimatized in Hingunghaut Talooka Chopra.	Well cleaned, long and strong in staple, by far the best sample of this variety, worth nearly as much as Hingunghaut.

8.	Cotton grown in Khandeish from New Orleans seed acclimatized in Hingunghaut Talooka Jamnier.	Not so well cleaned, wasty, poor staple and weak.

Samples of Dharwar cotton grown in Khandeish.

1.	Cotton grown in Khandeish from Dharwar seed Talooka Amulneir.	Well cleaned, medium staple, fair strength, much inferior in length of staple to sawginned Dharwar.
2.	Cotton grown in Khandeish from Dharwar seed Talooka Phalneir.	Irregular in staple, apparently fairly cleaned, but sample much too small to enable the Committee to give a decided opinion.
3.	Cotton grown in Khandeish from Dharwar seed Talooka Wurrungam.	Poorly cleaned, weak staple, fair color, altogether inferior.
4.	Cotton grown in Khandeish from Dharwar seed Talooka Errundole.	Badly cleaned, staple fair length but weak.
5.	Cotton grown in Khandeish from Dharwar seed Talooka Chopra.	Well cleaned, good color, but staple short and very weak.
6.	Cotton grown in Khandeish from Dharwar seed Talooka Roweree.	Fairly cleaned, fair color, good strength of staple and moderately long nice cotton.
7.	Cotton grown in Khandeish from Dharwar seed Talooka Bhurgam.	Badly cleaned, staple strong and fair length, similar in quality to No. 6, but cleaning much worse.
8.	Cotton grown in Khandeish from Dharwar seed Talooka Sowda.	Well cleaned, good color and staple the best of this variety.

Samples of Egyptian cotton grown in Khandeish.

1.	Egyptian cotton grown in Khandeish Talooka Dhoolia.	Apparently fair color for Fgyptian good staple, but sample too small for enabling committee to judge fairly.
2.	Egyptian cotton grown in Khandeish Talooka Bhurgam.	Stained and dirty, staple inferior to No. 1 but a good style of cotton.
3.	Fgyptian cotton grown in Khandeish Talooka Sowda.	Stained and dirty looking, but good staple.
4.	Egyptian cotton grown in Khandeish Talooka Chopra.	Well cleaned, but inferior in length and strength of staple to the previous samples.
5.	Fgyptian cotton grown in Khandeish Talooka Jamnair.	Rather dirty, good staple.
6.	Fgyptian cotton grown in Khandeish Talooka Thalneir.	Similar to No. 5 but staple a shade better.

Sample of cotton grown in Khandeish from seed imported last year from Oomrawuttee in Berar.

1.	Oomrawuttee cotton grown in Khandeish.	The whole crop of Khandeish is now of this quality, leafy medium staple fair strength, good color, but sample much inferior to those sent to the Chamber of last year's crop.

No. 182 of 1867.

Khandeish Collector's Camp, Jamnair,
23rd January 1867.

To the Secretary to the Chamber of Commerce, Bombay.

Sir,—I am much obliged to you for the opinion of the Chamber of Commerce, on the samples of cotton grown in Khandeish during this season. It appears from your report that the cotton

produced in the Sowda and Rowerce Talookas, is equal in value to genuine Hingunghaut. To enable me to decide what further measures should be taken for the introduction of Hingunghaut cotton, I shall be much obliged if you will favour me with the opinion of the Chamber, of the quality and value of the cotton now grown in Khandeish, as compared with the old Khandeish cotton. The cotton of the current year is now in the market, you will be able therefore to judge of its character better, than from any sample I could send you. You are perhaps aware, that larger quantities of Khandeish cotton are now being pressed at Julgaum and exported to England direct, this indicates a confidence in the character of the improved cotton of Khandeish, which is very encouraging. Last year by the exertion of local influence, two merchants were induced to press a few bales, but both the Hydraulic and half presses were practically idle. This year both presses are fully employed, and the Hydraulic Press, is working day and night. The question now arises, having a cotton of one uniform character which is generally admitted to be fully equal to Oomrawuttee, is the Hingunghaut cotton so much superior to Khandeish, as to make it advisable to introduce it and thus sacrifice the important element of uniformity. In the event of my failing to supersede the present Khandeish crop entirely, what would be the effect of a mixture of Hingunghaut and Khandeish cotton? Are the two cottons of such different qualities and character, that their mixture would affect the value of both? Would any alteration be required to spinning machinery, to adapt it to the mixture, and would it gin in a Platts' gin with facility and without injury to staple. I shall feel obliged by your favouring me with the opinion of the Chamber on these points, as early as possible, for if any further measures are to be taken for the introduction of Hingunghaut seed this season, they must be commenced immediately.

2. From your report on some of the samples of Hingunghaut cotton, I am afraid they must have become mixed, I have therefore forwarded you by banghy dak, half a pound of Hingunghaut cotton grown in Khandeish, which may be considered an average sample as to quality, though cleaner than could be expected, if packed in the careless way, usual with natives.

I have, &c.

(Signed) L. R. Ashburner,

Collector.

No. 9 of 1867.

Bombay Chamber of Commerce,
29th January 1867.

L. R. ASHBURNER, Esq., Collector, Khandeish.

SIR,—I have to acknowledge the receipt of your letter of 23rd inst. together with the large sample of cotton grown from Hinguughaut seed in Khandeish, to which your letter refers.

These shall be duly laid before the Committee of the Chamber at their first meeting which will probably be held on the first proximo, when I trust to have their instructions on the various points on which you desire to have their opinion.

Meantime I have the pleasure to annex herewith particulars of the opinion passed by the Committee on three samples of cotton received from you, after the report on the other samples had been made and forwarded.

I have, &c.
(Signed) JAMES TAYLOR,
Secretary.

Memorandum of samples of cotton received from the Collector of Khandeish.

1.	Cotton grown in Talooka Nusseerabad, Khandeish, from Hinguughaut seed.	Good staple, good color, a little leafy and stained, almost equal to Hinguughaut.
2.	Cotton grown in Talooka Wurrungaum	Cleaner and better color than No. 1 quality about same.
3.	Sample of cotton grown in Khandeish Egyptian seed Talooka Uvidale.	Good color for Egyptian, fair staple well cleaned, a very desirable kind of cotton.

(Signed) JAMES TAYLOR,
Secretary.

No. 15 of 1867.

Bombay Chamber of Commerce,
15th February 1867.

L. R. ASHBURNER, Esq., Collector, Khandeish.

SIR,—Referring to my letter of the 29th ultimo, I have now the honour to inform you that your letter of 23rd idem was duly submitted to the Committee of the Chamber for their opinion

on the various points on which you desired information—together with the large sample of cotton grown from Hingunghaut seed advised therein.

Regarding the sample of cotton I am desired to report to you that the Committee find the color good and the cotton well cleaned; that it is similar to Hingunghaut both in strength and color—excepting that the staple is slightly shorter, they consider it a very desirable kind of cotton, and if it could be grown in quantity equal to the sample it would be a matter of very great importance to the cause of the improvement of cotton cultivation in this part of India.

On the points in your letter under acknowledgment on which you desire to be favoured with the opinion of the Committee, I am to state, that in regard to the present year's crop of cotton from Khandeish, it is not considered quite so good as the cotton of last year, though of course infinitely superior to the old Khandeish cotton, which was the worst variety grown in the Presidency; and the Committee are sensible of the great services you have rendered to the Commerce of Bombay by the exertions you have made to supplant a variety that made Khandeish cotton a byeword in our markets for all that was inferior and worthless.

The Committee are of opinion that if cotton similar to the large sample grown from Hingunghaut seed which you lately sent for examination and report could be produced, it would be so great an improvement on even the new Khandeish cotton that it would be well worth while to spend time and money in making an experiment on as large a scale as your complete knowledge of the province and of the people of Khandeish might lead you to consider expedient.

Should you find yourself unable to supersede the present Khandeish crop by the experiments you propose making, the Committee would earnestly warn you to be careful to prevent any mixture of the new Khandeish and Hingunghaut varieties as any mixture of this kind would certainly lead to the injury of both kinds.

None of the experiments in the culture of cotton which you propose making would affect spinning or ginning machinery, or make alterations in these matters in any way necessary. The Committee intend to address Government on the subject of your cotton experiments in Khandeish, and will hand in at same time a copy of this letter.

I have the honor to be, &c,
(Signed) JAMES TAYLOR,
Secretary.

No. 24 of 1867.

Bombay, 23rd February 1867.

F. S. CHAPMAN, Esq.,

Chief Secretary to Government.

Bombay.

SIR,—I am directed by the Committee of Management of the Chamber of Commerce to forward herewith for the information of Government copy of a letter received from Mr. Ashburner, Collector of Khandeish, and of the Chamber's reply thereto on the subject of experiments which Mr. Ashburner proposes to make in Khandeish for the introduction of a variety of cotton to be grown from Hingunghaut seed.

The Committee consider this matter of so much importance to the cause of the improvement of cotton culti ation that they venture respectfully to ask Government to give its continuance and support to the proposed experiments of the Collector whose energy and public spirit in the cause of improved cotton cultivation in Western India, the Chamber desires cordially to acknowledge.

I have the honor to be, &c.

(Signed) JAMES TAYLOR,

Secretary.

No. 864 of 1867.

REVENUE DEPARTMENT,

Bombay Castle, 28th February 1867.

To the Secretary to the Chamber of Commerce, Bombay.

SIR,—I am directed to acknowledge the receipt of your letter noted in the margin, and, in reply, to inform the Chamber that Government have already arranged for the introduction of Hingunghaut cotton seed into one or two Talookas of the Khandeish Collectorate in the present year.

* No. 24 date 23rd February 1867.

I have the honor to be, &c.

(Signed) J. KING,

For Chief Secretary to Government.

Bhundarah Central Provinces,
November 17th 1866.

To the Secretary Bombay Chamber of Commerce,

Sir,—I have the honour to forward two specimens of cotton grown under my surveillance in the Jail Garden of this district, and shall feel obliged by your laying it before the Chamber for their opinion as to the quality of the fibre.

I beg to say that both specimens are derived from "Dharwar acclimatized new Orleans seed," and that that sample which is marked No. 1 is the production (this year) of a tree which was planted in 1863 and pruned each year since. The sample marked No. 2, is this year's produce from the seed of No. 1.

I shall feel obliged by an early reply as I am anxious to make a report on the subject to Government. I need hardly say that there is no necessity to return the samples.

I have the honor to be, &c.,
(Signed) H. F. McGrath, Assistant Surgeon,
Civil Surgeon, Bhundarah.

No. 237 of 1866.
Bombay Chamber of Commerce,
1st December 1866.

H. F. McGrath, Esq., Civil Surgeon.,
Bhundarah, Central Provinces.

Sir,—I have to acknowledge the receipt of your of the 17th ultimo, handing samples of cotton from Dharwar acclimatized seed grown in the Jail Garden of your district which were duly submitted to the Committee of the Chamber of Commerce for their opinion.

In reply I am directed to inform you that the colour and staple of the cotton are considered good, but it is impossible to judge fairly of samples of cotton in the kuppas.

I am, however, to state that the Chamber has an objection to giving opinions on samples of cotton the mere produce of Garden cultivation, as samples of cotton grown under such circumstances, do not fairly represent what the same cotton would be if grown in fields in the usual manner and subject to the usual conditions of the cotton culture of the district where it may chance to be cultivated, and therefore such opinions are very apt to mislead.

I have the honour to be, &c.,
(Signed) James Taylor,
Secretary

To the Secretary to the Chamber of Commerce, Bombay.

SIR,—I have the honor to forward herewith a sample of New Orleans cotton from the Dharwar acclimatized seed grown at Indore in Malwa, I shall feel highly obliged if you will be good enough to let me know the opinion of the Chamber about it, and the price it may command in the English market.

I have the honour to be, &c.,

(Signed) RAMCHUNDER VITTAL,
H. H. Holkar's Vakeel.

Indore, 1st February 1867.

No. 21 of 1867.

Bombay Chamber of Commerce,
16th February 1867.

RAMCHUNDER VITTAL, Vakeel, Indore.

SIR,—I have to acknowledge the receipt of your letter of the 1st instant, together with the sample of cotton grown from Dharwar acclimatized seed at Indore, to which it refers, which was duly submitted to the Committee of Management of the Chamber of Commerce for their opinion.

In reply I am directed to inform you that the Committee consider the kuppas to be of good quality, long and strong in staple and good color—but I am farther requested to state that the Committee are always averse to expressing an opinion on uncleaned cotton or on small samples such as that you sent, as opinions given on small experiment are apt to mislead.

I am, &c.
(Signed) JAMES TAYLOR,
Secretary.

No. 185 OF 1867.

Dharwar, 16th February 1867.

To JAMES TAYLOR, Esq.,
Secretary to the Chamber of Commerce,
Bombay.

SIR,—I have the honor to inform you that I have to-day dispatched by banghy post a parcel to your address containing two samples of ginned cotton respectively marked A and B.

2. Both parcels are from the same samples of Dharwar acclimatized New Orleans kappas, but have been ginned in this factory with two different sets of saws.

3. I would beg the favor of your sending me the opinion of the Chamber on the two samples pointing out if there is any difference in cleaning, and if so full particulars of which parcel is the best cotton; the report should also I beg to state contain the Committee's opinion regarding the drawbacks of the sample that may be considered inferior.

4. I shall esteem it a favour if you will send me a very early reply as mainly upon the Chamber's opinion depends the rejection or otherwise of a large supply of saws that have been sent from England for cleaning Indian New Orleans cotton.

I have the honor to be, &c.

(Signed) W. WALTON,
Acting Superintendent Dharwar Factory.

No. 22 of 1867.

Bombay Chamber of Commerce, 23rd February 1867.

W. WALTON, Esq.,
Acting Superintendent Dharwar Factory,
Dharwar.

SIR,—I have to acknowledge the receipt of your letter of the 16th inst., together with two samples of ginned cotton marked A and B therein referred to which were duly submitted to the Committee of the Chamber for inspection at their meeting yesterday.

In reply I am directed to inform you that they find sample marked A pretty well cleaned, but staple very short and weak, and apparently injured in ginning.

The sample marked B is full of leaf and badly cleaned, staple slightly better than sample A, but also apparently injured in ginning.

I have the honor to be, &c.

(Signed) JAMES TAYLOR,
Secretary.

No. 251 of 1867.

Dharwar, 23rd February 1867.

To JAMES TAYLOR, Esq.,

Secretary to the Chamber of Commerce,

Bombay.

SIR,—I have the honor to inform you that I have dispatched to your address a banghy parcel the contents of which are samples of cotton, &c. marked as follows :—

A 1. Bolls of New Orleans cotton grown in the Kulladghee zillah Bombay Presidency season 1866-67 from Dharwar New Orleans seed.

A 2. "Kuppas" or seed cotton from the same field as the above Bolls.

N.B.—This cotton is extensively cultivated in large fields without irrigation and in the same manner as the indigenous variety.

B. A sample of cleaned Dharwar grown Peruvian cotton, no irrigation; the commonest field cultivation.

N.B. This is the cotton referred to in resolution of the Bombay Government No. 633 dated 15th February 1867 which accompanied my letter No. 216 to your address of the 19th instant.

C 1. Cleaned cotton grown in 1866-67 in the Khargaum district of Central India in the territory of His Highness Maharajah Holkar from Dharwar New Orleans seed; no irrigation; the most ordinary field cultivation.

C 2. Seed of the above which is sent to show how the cotton has been cleaned.

C 3. A parcel of cleaned indigenous cotton from the same district sent as a comparison.

N.B. I am indebted for these three samples marked C to Mr. Ramchunder Vittul His Highness Vakeel, and that officer by detailed particulars that he has sent me calculates that a beegah of land will at Khargaum return 126 lbs. of seed cotton of indigenous against 288 lbs. of the New Orleans variety; the whole expense of cultivation with indigenous is Rupees 9-13-6 leaving a profit to the farmer of only Rupees 2-3-10 whilst New Orleans will cost Rs. 12-11-6 per beegah for cultivation and give a profit of no less than Rupees 15-4-6; this shows how very important the experiment is.

D 1. Is a sample of cleaned New Orleans cotton (also sent me by Mr. Ramchunder Vittul) of the season 1866-67 grown from Dharwar seed in the Dholpore district of His Highness Maharajah Holkar.

D 2. "Kuppas" is a sample of the same Dholpore New Orleans cotton as picked from the plants.

N.B. This cotton is planted without irrigation and by the most ordinary field cultivation.

E 1. Cleaned cotton grown in the Ahmedabad Collectorate of the Bombay Presidency from Egyptian seed; season 1866-67.

E 2. A sample of the same growth of cotton in "kuppas."

N.B.—A large field experiment, no irrigation and the commonest field cultivation.

I shall esteem it a favor if you will procure and forward me the Chamber's opinion upon the samples sent separately with their computed values respectively compared with the ordinary kinds of indigenous cotton sold in Bombay J.E. The Ahmedabad Egyptian compared with ordinary Ahmedabad native cotton or "Dhollerah," the Kulladghee New Orleans with ordinary "Sholapore" or "Vingorla" and so on.

I solicit these particulars with a view of their being published hereafter, and as it is advisable for obvious reasons that the results should be made known in ample time before the next sowing season, I beg the favor of an early reply.

I have the honor to be, &c.,
(Signed) W. WALTON,
Acting Cotton Commissioner.

No. 32 of 1867.

Chamber of Commerce, Bombay, 11th March 1867.

W. WALTON, ESQ., Acting Cotton Commissioner,
Dharwar.

SIR,—I have now the honor to inform you that the samples of cotton advised in your letter of the 23rd ultimo and received in due course, were examined by the Committee of the Chamber at their last meeting—and by their direction, I annex herewith a memorandum giving a detailed statement of their opinion on the various samples submitted for their consideration and report.

I have the honour to be, &c.,
(Signed) JAMES TAYLOR,
Secretary.

Memorandum of report made by the Committee of the Chamber of Commerce, Bombay, on certain cotton samples submitted for opinion by Mr. Walton, Dharwar.

A 1.	Bolls of New Orleans cotton grown in the Kulladghee zillah Bombay Presidency, season 1866-67 from Dharwar New Orleans seed.	The Committee are unable to express an opinion on bolls with seed or kuppas as so much depends on ginning and cleaning afterwards that opinion on kuppas are apt to mislead.
A 2.	"Kuppas" or seed cotton from the same field as the above Bolls.	
B.	A sample of cleaned Dharwar grown Peruvian cotton, no irrigation; the commonest field cultivation.	Fair color, but partially stained, staple long and strong, superior to any indigenous varieties.
C 1.	Cleaned cotton grown in 1866-67 in the Khargone district of Central India in the territory of His Highness Maharajah Holkar from Dharwar New Orleans seed; no irrigation; the most ordinary field cultivation.	Good color, staple weak, fairly cleaned.
C 2.	Seed of the above which is sent to show how the cotton has been cleaned.	*No opinion given on seed and kuppas.*
C 3.	A parcel of cleaned indigenous cotton from the same district seed as a comparison.	Much inferior to C 1, a poor discription of cotton, short and weak in staple.
D 1.	Is a sample of cleaned New Orleans cotton (also sent me by Mr. Ramchunder Vittul) of the season 1866-67 grown from Dharwar seed in the Dholpore district of His Highness Maharajah Holkar.	Good color, well cleaned, good staple, decidedly superior to C 1.
D 2.	"Kuppas" is a sample of the same Dholpore New Orleans cotton as picked from the plants.	No opinion given on seed and kuppas.

E 1.	Cleaned cotton grown in the Ahmedabad Collectorate of the Bombay Presidency from Egyptian seed, season 1866-67.	Very long and fine and strong staple, superior to any variety grown in Western India, no opinion on kuppas.
E 2.	A sample of the same growth of cotton in "kuppas."	

No. 267 of 1867.

To JAMES TAYLOR, Esq.,
Secretary to the Chamber of Commerce, Bombay.

Dharwar District, Camp Kulghutghee,
28th February 1867.

SIR,—I have the honour to request you will be so good as to express my thanks to the Committee of the Chamber for the opinion (on two samples of cotton) contained in your letter dated 25th instant.

I have the honor to be, &c.,
(Signed) W. WALTON,
Acting Superintendant Dharwar Factory.

No. 257 of 1867.

Dharwar Jail Office, 27th April 1867.

To the Secretary Chamber of Commerce, Bombay.

SIR,—I have the honor to send you this day per Bhangy two parcels each containing 1lb. of hand cleaned Peruvian cotton as a sample of the kind grown by me in the Jail Garden, Dharwar.

1 lb. of this year's growth.
1 lb. of three years' old trees.

I would esteem it a favor if the Chamber would be good enough to give me their opinion on the quality of the sample, the price they put upon it per lb., and what it would fetch in England.

The quantity I now possess of third year's Peruvian clean cotton is about lbs. 90, but the picking is still going on. The trees are grown in black soil and no artificial irrigation has been given.

I would be further obliged if the Chamber of Commerce desire to have my present supply, that they will name the price they would be inclined to give, but I chiefly desire their opinion as to the quality and price that they put upon it.

As the chief difficulty with Peruvian cotton on account of its length of staple and closeness of seed seems to be in procuring a proper saw cleaning machine, I further send you lb. 1 seed or uncleaned cotton either to be experimented on in Bombay or sent to England, and I would be much obliged with the results if the Chamber will furnish me with the information.

I have unsuccessfully tried Dr. Forbes' tredle gin as well as Platt and Macartney's, but both failed, the cotton turned out being very dirty and full of broken seed.

The foot roller cleaning process turns out much dirtier cotton than either of the above.

I have the honor to be, &c.,
(Signed) J. MACKENZIE,
Superintendent Dharwar Jail.

No. 58 of 1867.

Bombay Chamber of Commerce,
6th May 1867.

To DR. MACKENZIE,
Superintendent of Jail, Dharwar.

SIR,—I have to acknowledge the receipt of your letter of the 27th ultimo together with the samples of cotton grown from Peruvian seed to which it refers—which were duly submitted to the Committee of the Chamber at their last meeting.

In reply, I am directed to inform you that the Committee after an examination of the samples find both excellent. The staple is considered long and strong, but colour somewhat reddish—cotton of the quality of the samples would probably fetch 3d. per lb., in the Liverpool market above fair Dhollera. The sample of cotton of the third year's growth, appears superior to that of the first.

I am however directed to point out that you do not in your letter give sufficient information as to the extent of ground that was under cultivation, nor of the character of the cultivation under which the cotton was raised. On samples of cotton from mere garden cultivation—the Committee object to give opinions as cultivation of this character invariably misleads. If the cotton that has been submitted is a fair sample of what could be produced in the Dharwar district to a considerable extent under the ordinary system of cultivation—it would be a matter of the utmost importance as the cotton would be superior to what is now produced in the South Mahratta country from acclimatized New

Orleans seed. On the other hand if this cannot be done—mere garden cultivation has little value in reference to a general improvement in the cotton culture of the districts in question.

Regarding the quantity you have on hand it is too small to offer for sale here, but if you can send it to the Chamber free of expense, I have no doubt it will be forwarded by one of the firms connected with it to England for sale, and this would certainly be the best mode of testing the value of the cotton.

I have the honour to be, &c.
(Signed) JAMES TAYLOR,
Secretary.

No. 394 of 1867.

Dharwar Jail Office, 14th June 1867.

To the Secretary to the Bombay Chamber of Commerce,
Bombay.

SIR,—Adverting to the 4th para of your letter dated 6th ultimo, I have the honor to inform you, that a bale of Peruvian cotton (produced from the cotton plantation in the Jail Garden), and consigned to you, has been despatched from Carwar on the 2nd instant, on board the steamer "Earl Canning," and I beg to request that you will be so good as to ask the person who sends it to England, to procure for me the opinion of the Chamber of Commerce (either of Liverpool or Manchester) on the qualities of the staple.

I have honor to be, &c.
(Signed) JAMES MACKENZIE.
Superintendent of the Jail, Dharwar.

No. 89 of 1867.

Bombay Chamber of Commerce.
18th June 1867.

To the Superintendent of the Jail, Dharwar.

SIR,—I have to acknowledge the receipt of your letter No. 394 dated 14th inst. with reference to which I have the pleasure to inform you that the bundle of cotton shipped per "Earl Canning"

from Carwar has been duly received and placed in charge of the firm of the Chairman of the Chamber who will have it despatched by an early opportunity to Liverpool for sale, and will at the same time instruct their correspondents in England to obtain an opinion on the quality of the staple.

I have the honor to be, &c.
(Signed) JAMES TAYLOR,
Secretary.

No. 3396 of 1867.

Nagpore, 8th August 1867.

To the Secretary Chamber of Commerce,
Bombay.

SIR,—I have the honor to hand you a railway receipt for a box containing specimens of cotton grown in the Berars, from Exotic (Dharwar acclimatized) seed, and I shall be much obliged by your obtaining for me the opinion of your Chamber on the respective merits of the different samples.

2. I would especially beg you to favor me with an opinion on the following points.

(I.) The merits of this cotton as compared with the indigenous cotton of Berar and Hinguughaut.

(II.) The condition of the staple whether it has been damaged in "ginning."

Specimens of "kuppas," or cotton in the seed, are also sent, so as to enable your Chamber to judge of the merits of the cotton before it goes to the gin.

3. Small samples of the seed are also sent. I regret parcel (VI) is unavoidably so small.

I have the honor to be, &c.
(Signed) H. RIVETT-CARNAC,
Cotton Commissioner for the Central Provinces and the Berars.

LIST OF COTTON SENT.

(I.) No. I.A Cotton of Tarkhna and Rudgam fields.
(II.) No. I.A Cotton seed of Tarkhna and Rudgam fields.
(III.) No. II.Pongaon cotton.
(VI.) No. II.Kuppas of Pongaon cotton.
(V.) No. II.Seed of Pongaon cotton.
(VI.) No. II.A cotton of Ellichpoor.
(VII.) No. II.A Kuppas of Ellichpoor.
(VIII.) No. II.A Seed of Ellichpoor.

No. 118 OF 1867.

Bombay Chamber of Commerce.
20th August 1867.

H. RIVETT-CARNAC, Esq.,
Cotton Commissioner Berars and Central Provinces,
Nagpore.

SIR,—I have to acknowledge the receipt of your letter of the 8th instant together with the box containing the cotton samples therein advised. The samples of cotton were duly submitted to the Committee of the Chamber at their last meeting, and I have now the honor to subjoin a memorandum giving their opinions thereon. I am farther directed to state, that in the opinion of the Committee, the cotton of which samples were laid before them is of an inferior character, and not comparable to good Oomrawuttee or Hingunghaut.

I have the honor to be, &c.,
(Signed) JAMES TAYLOR,
Secretary.

Memorandum conveying opinion of the Committee of the Chamber of Commerce on certain samples of cotton grown in the Berars from Dharwar acclimatized seed—submitted for inspection and opinion by H. Rivett-Carnac Esq. Cotton Commissioner Berars and Central Provinces :—

No. I.A Cotton of Tarkhna.....Sample appears to be made up of two descriptions; one short, weak and wasty; the other of fair length and strength,—but not equal to good Hingunghaut

No. II.Pongaon Cotton .....Staple very irregular, and very badly cleaned, very inferior to Oomrawuttee, and unsaleable to Europeans.

No. II.A Cotton of Ellichpore...Very soft, short and wasty.

On the samples of kuppas and seed sent of the above descriptions—the Committee give no opinion—they cannot judge of the seed, and opinions of kuppas are apt to mislead as the character of the cotton is often changed in the process of cleaning and ginning.

No. 1984 OF 1867.

REVENUE DEPARTMENT,
Bombay Castle, 27th May 1867.

To the Secretary to the Chamber of Commerce, Bombay.

SIR,—With reference to Mr. Acting Under-Secretary King's letter No. 4243, dated the 19th November last, I am directed to forward the accompanying copy* of an Extract from the proceedings of this Government regarding New Orleans cotton grown in the Shahpoor district in the Punjab together with the sample therein referred to, and to invite the co-operation of the Chamber in forwarding the views of that Government.

* No. 1983, dated 27th May 1867.

I have the honour to be, &c.,
(Signed) H. E. JACOMB,
Under-Secretary to Government.

No. 1983.

Extract from the Proceedings of the Government of Bombay in the Revenue Department, dated 27th May 1867.

Read the following papers :—

Letter from J. H. Thornton, Esq., Secretary to Government, Punjab, to F. S. Chapman, Esq., Secretary to Government, Bombay, No. 269, dated 6th May 1867.

In reply to your letter No. 4247, dated 19th November last, I am directed to forward copies of a letter and its enclosures from the Secretary to the Financial Commissioner, No. 209, of the 25th ultimo, together with a sample of the species of New Orleans cotton grown in the Shahpoor District, and to state that the Honorable the Lieutenant Governor can confidently assert the correctness of Dr. Henderson's statement as to the Punjab cultivator being unable, as a rule, to obtain a better price for good than for inferior cotton. European capitalists have not as yet, save in a very few instances, and to a very limited extent, gone into the markets of the Punjab to purchase cotton, still less have they ever had direct dealings with the cultivators themselves. Nor have any native capitalists, well acquainted with the requirements of the Europe Markets, turned their attention to this quarter; so that as yet the Punjab cultivator has little or no idea of the great difference of value in Europe of cotton of differ-

ent qualities, and although this is now doubtless fully appreciated at the great commercial cities on sea-board, no effective measures have yet been adopted to extend this appreciation to parts so remote as this province.

Whether the difficulties and costliness of cultivating the New Orleans variety in Shahpoor are such as has been stated to the Deputy Commissioner of that district, His Honor cannot undertake to say: but Dr. Henderson who has more practical experience on this point than any other person, seems clearly to be of a very different opinion. That there is considerable difficulty in completely separating the seed from the fibre by means of the native "charkha" or gin, His Honor knows to be the fact, and he believes this to have had no inconsiderable share in checking the extension of this variety. But if any European or Native cotton dealer who is in the habit of exporting cotton should consider it worth his while, on inspecting the accompanying sample of cotton, to offer a good price for it, and authorize the Deputy Commissioner of Shahpoor to secure for him as large a quantity as possible of the present cotton season, His Honor feels sure that all difficulties would be overcome, and that the raising of this cotton would become much more popular.

Copy of a letter from J. A. E. Miller, Esq., Secretary to Financial Commissioner, to J. H. Thornton, Esq., Secretary to Government, Punjab, No. 209, dated 25th April 1867.

New Orleans cotton grown in Shahpoor district.

With reference to your No. 676, of 13th December 1866, I am directed to convey the following information and remarks with regard to a species of New Orleans cotton grown in the Shapoor district, respecting which enquiries have been made by the Bombay Government.

2. The communications received from the Deputy Commissioner of Shahpoor, and from Dr. Henderson, Secretary to the Agri-Horticultural Society, of which copies are enclosed, as per margin, show that the history of the introduction of this variety of cotton into Shahpoor is involved in some obscurity; but whatever be the true account of the origin of the cultivation, there can be no doubt that a variety of cotton is produced in Shahpoor which strongly resembles New Orleans. The cultivation, however, requires more care than the natives are in the habit of bestowing on agricultural pursuits;

No. 157, dated 11th ultimo, from Deputy Commissioner Shahpoor, No.——, dated 16th January 1867, from Dr. Henderson.

No.——, dated 18th March 1867, from ditto.

the crop comes to maturity at an unfavourable time, and the yield is consequently small and precarious; for these reasons the cultivation of this superior variety seems to be comparatively unpopular and confined to the more well-to-do Zemindars who can afford the luxury and are content with the risk.

3. A sample of the cotton received from Shahpoor is sent herewith. It is pronounced by Dr. Henderson to be much below the average. He is of opinion that it is difficult now to identify this variety, as foreign seeds of various kinds have from time to time been distributed in Shahpoor, and the kinds have become intermixed in the course of acclimatization

4. With regard to the further point raised, that native growers get as much for bad cotton as for good, it will be seen that Dr. Henderson quotes a passage from Dr. Royle's work on the productive resources of India in support of his view. It seems, however, very unreasonable to suppose that even if in individual instances, or during the infancy of a new cultivation or industry this may be the case, that it would continue to hold good at all times. If it did, there would be an end to all progress in agriculture and the industrial arts, for after all in the absence of competition, the remuneration to the producer must be at the root of all improvement in production. There would be no inducement to the agriculturists generally to raise a product that consumers and their agents will not buy at a remunerative rate. But until it be very clearly established that it is a fact that native growers get no more for good cotton than for bad cotton, it would seem needless to attempt to account for such a state of things.

5. Perhaps the best way to put the theory to the test would be for those interested in the question in Bombay to obtain a supply of this superior cotton through the agency of the local authorities, or through an agent of their own specially deputed, and to judge for themselves as to whether such cotton would, if exported in sufficient quantities, command a better price than the inferior cotton that is usually sent down the Indus. If it would, no more powerful inducement could be held out to the Zemindars of Shahpoor and elsewhere to improve their cultivation. It must be remembered, however, that it is not so much the actual price obtained, as compared with that obtained for inferior cotton, that will affect production, as the price obtained relative to the cost of production, or, in other words, the proportion of remuneration to be enjoyed by the growers. If the production of superior cotton with present appliances is too costly to be remunerative, it will not be grown until something can be done by improving the appliances towards diminishing the cost of production

Copy of a letter No. 157, dated 11th March 1867, from Captain W. G. Davies, Deputy Commissioner, Shahpoor, to J. A. E. Miller, Esq., Secretary to Financial Commissioner, Punjab.

I have the honor to furnish the report called for in your No. 22, of 2nd January last, and to return the enclosures thereof.

2. The points on which information is required appear to be the following:—1st.—The circumstances that led to the introduction into this district of New Orleans cotton, and its subsequent acclimatization; and, 2nd,—Why, if a superior cotton can be grown here, it is not largely exported.

3. With regard to the first point, I may say that although it is not certain that this cotton is American, yet that, judging from its general appearance, there would seem to be little doubt on the subject. It is here known by the name of "Bujwarra" and is said to have been first imported by Colonel Skinner of Skinner's Horse, and to have been first brought to this district by a travelling merchant. It is further added that it obtained its name from Bujwarra, a town in the Hastnarpoor district, where the fibre of this species of cotton was made into a superior kind of cloth which attained to some repute.

4. The reasons for not growing this kind of cotton in a larger scale are that it requires much greater care for its successful culture, and that owing to the cold setting in early in this part of India, the yield as compared with that indigenous cotton is very small, the pickings of the latter commencing in October last, till nearly the end of January, whereas the pods of the former do not begin to open till the middle of October, and by the close of the following month the cold setting in destroy the vitality of the plants, and the pods die off before they come to maturity. In short the climate does not suit this description of cotton, and it is therefore only grown as a luxury by the few well-to-do Zemindars who can afford to indulge in it for the sake of obtaining a few yards of superior cloth for their own use. It is also stated that the fibre of this kind of cotton adheres so closely to the seeds, that the rude machinery invented for separating the one from the other does the work, in the case of this cotton, very ineffectually. The same cotton is said to be grown in Hindoostan, where it is called from the fineness of the fibre "Nurma."

5. Two parcels, containing each half a seer, with a few seeds in each to facilitate identification, are forwarded with this report, one to be sent on to the Commissioner of Cotton, Sind.

Copy of a letter from Dr. G. Henderson, to J. A. E. Miller, Esq., Secretary to Financial Commissioner, dated 16th January 1867.

I send herewith an extract from "Royle's Productive Resources of India," page 327—

> "Planters in the interior of India complain that they have no encouragement to bestow extra labour, or incur greater expense in growing superior cottons, as these when brought to market at the *Presidency*, bring only the same prices ordinary cotton of the country."

I came on the above by chance the other day, and perhaps you will kindly forward this on to the Cotton Commissioner, Bombay, as it confirms the statement I made to him that cultivators in the Punjab cannot get a better price for good than for bad cotton. Doctor Royle's remark was published in 1840.

Copy of a demi-official letter from Dr. G. Henderson, to J. A. E. Miller, Esq., Secretary to Financial Commissioner, Punjab, dated 18th March 1867.

I return you the letters about Shahpoor cotton, and also the samples. The New Orleans is a very inferior sample, in the Punjab; it is always coarser than the Egyptian, but the yield of the latter per acre is only a few pounds usually. So many different kinds of cotton seed have been distributed in the Shahpoor district, that it is now almost impossible to say which is the original sort; but every Zemindar I asked assured me that the large podded long staple cotton had been grown ever since he could remember. I have heard it suggested that some Americans in the Sikh service, on passing through the Punjab, might have originally brought the seed. It is certainly what is called "New Orleans," whether it came from America or not. This cotton requires greater care in picking, as it seeds during many months, and of course requires longer protection from goats. I never found the strongest frost injure it, and I have grown it at Shahpoor for several years. I also found that the native gin separates the wool from the seed with very little more difficulty than in the case of country cotton.

The best cotton I have ever seen was a hybrid I raised between "New Orleans" and Egyptian. I had ¼ beegha of it, but left the station before the crop was ripe, and it was lost.

RESOLUTION.—Copies may be sent to the Chamber of Commerce with a portion of the sample, and the Chamber should be invited to co-operate in forwarding the views of the Punjab Government.

2. Copies may also be sent to the Commissioner in Sind, in order that a similar reference may be made to the Chamber of Commerce at Kurrachee

3. Mr. Walton should also be supplied with a copy of this correspondence.

Ordered that copies of the above be forwarded to—

The COMMISSIONER in SIND,
W. WALTON Esq., in charge office of Cotton Commissioner,
The CHAMBER OF COMMERCE.
} With a portion of the sample.

(Signed) M. J. SHAW STEWART,
Acting Chief Secretary to Government.

No. 76 of 1867.

Bombay Chamber of Commerce,
4th June 1867.

H. E. JACOMB Esq.,
Under-Secretary to Government,
Revenue Department,
Bombay.

SIR,—I am directed by the Committee of Management of the Chamber of Commerce to acknowledge the receipt of your letter No. 1984 dated 27th ultimo together with the extract from proceedings of Government to which it refers in reference to the culture of cotton from New Orleans seed in the Shahpoor district in the Punjab, and inviting the co-operation of the Chamber in forwarding the views of the Punjab Government on the subject.

In reply, I am to state, that it will afford the Committee much pleasure to aid the Punjab Government in reference to the cotton experiments in question by every means in their power, and I have farther the pleasure to mention for the information of Government that the Chamber has already been in communication with the Punjab authorities on this matter, when the opportunity was availed of to tender the services of the Chamber to that Government in any way that it could be of use.

I have the honour to be, &c.,
(Signed) JAMES TAYLOR,
Secretary.

APPENDIX G.

COTTON STATISTICS.

No. 218 of 1867.

REVENUE DEPARTMENT.

Bombay Castle, 16th January 1867.

To the Secretary to the Chamber of Commerce, Bombay.

SIR,—I am directed by His Excellency the Governor in Council to forward, for the information of the Chamber, an Extract from the proceedings of this Government of this day's date No. 217, regarding a system of reports suggested by them on cotton culture, in supercession of the one at present in force.

I have the honour to be, &c.,
(Signed) J. KING,
For Chief Secretary to Government.

No. 217.

EXTRACT from the Proceedings of the Government of Bombay in the Revenue Department, dated 16th January 1867.

Read the following letter from W. Walton, Esq., in charge office of Cotton Commissioner, to F. S. Chapman, Esq., Chief Secretary Her Majesty's Government, Bombay, No. 7, dated 5th January 1867.

I have the honor to report that on the 21st ultimo I attended a meeting of the Bombay Chamber of Commerce.

2. Amongst other matters regarding the duties of this department it was strongly brought to my notice by the Chamber that a system of reports on cotton culture much more useful than the one at present in force might with advantage be adopted.

3. At present the merchants of Bombay have mainly to depend upon information obtained from unreliable sources.

4. The Honorable Mr. Hunter, Chairman of the Managing Committee, suggested to me that arrangements might be made for the following reports:—

1st.—Extent of land under, or intended for, cotton cultivation to be published not later than October.

2nd.—Short report on the appearance of the crop to be published not later than the 1st of December.

3rd.—A similar short report to be published not later than Christmas-day.

4th.—The annual report as soon as possible in the new year.

5. Regarding report No. 1, I would beg to suggest that it be posted by the Collectors to this office not later than the first week in October, so that at the latest Government may be in receipt of the full returns by about the 15th of that month. The reports should, I respectfully consider, be in detail, giving particulars of each Talooka showing a comparative statement of the preceding year, and including Jagheers.

6. For the report No. 2, a letter from each Collector will be sufficient, merely stating how the crop appears to be getting on, with any other remarks that the Collectors may be pleased to add in the way of information, or suggestions for improvement. These letters to be posted to this office nor later than the 15th of November, in order that they may be submitted to Government in time for publication before the date suggested by the Chamber of Commerce. In some districts it is probable that the late sowings may not be completed by the 15th of November. In such cases this should be recorded by the Collector, with a report of how much of the crop it is calculated remains to be planted.

7. The report No. 3 may be similar to No. 2, and should be sent to this office not later than the 10th of December, in order that Government may be in a position to issue orders on the full return before the Christmas holidays.

8. Regarding report No. 4, I would beg to suggest that the district officers be asked to report the *very earliest* date on which they can supply the returns now annually submitted. What is wanted, and what the merchants wish to get, is a return of the *probable* out-turn, and it appears to me that this might be furnished as soon as the cotton bolls begin to ripen on the plants. If anything afterwards transpired to cause the returns to be fallacious, that is, if the crops turned out either much more or much less than was expected, the Collector might make a special report

on the matter. The Chamber of Commerce very strongly urged upon me that at present the annual returns are published so late as to very much detract from their usefulness.

9. Should Government be pleased to issue orders on this report, it might be considered whether it is advisable to extend them to the Political Department, as large quantities of cotton are grown in native states (such as that of His Highness the Guicowar of Baroda, &c.), regarding which no reliable returns are ever published.

10. In conclusion, I respectfully beg to state that I promised the Chamber of Commerce that I would bring this matter to the early attention of Government.

RESOLUTION.—Copies of this letter should be sent to the proper officers, who should be asked to supply such information as far as they can. But it is hopeless to expect that any reliable information can be procured as to the area of ground that will probably be sown with cotton, or as to the expected out-turn from the crops growing.

2. The Revenue Commissioners will be requested to direct all Collectors to submit direct to the Cotton Commissioner, by the 15th of November in each year, a statement showing the extent of ground under cotton cultivation, as contrasted with the quantity cultivated during the preceding year. The Collectors will also be requested to furnish the Cotton Commissioner by the 15th of January with a brief report detailing the general prospects of the season.

3. The Cotton Commissioner should ascertain from the several political officers the particulars that they themselves are of opinion can be furnished with some degree of accuracy.

4. All the information obtained in the manner above indicated should be sent direct to the Cotton Commissioner, who should be authorised to publish it in the *Government Gazette* without further reference to Government.

Ordered that copies of the above be forwarded to—

The REVENUE COMMISSIONER N. D.,
The REVENUE COMMISSIONER S. D.,
W. WALTON, Esq., in charge office of Cotton Commissioner,
The POLITICAL DEPARTMENT of the SECRETARIAT.

(Signed) J. KING,
For Chief Secretary to Government.

No. 991 A of 1867.

REVENUE DEPARTMENT.

Bombay Castle, 11th March 1867.

To the Secretary to the Chamber of Commerce, Bombay.

SIR,—I am directed by His Excellency the Governor in Council to forward herewith for the information of the Chamber, an Extract from the proceedings of this Government of this date, No. 991 comprizing a report by Mr. Walton, in charge office of Cotton Commissioner, on the cotton crop of the Collectorates in the Southern Division of this Presidency for the season 1866-67.

I have the honor to be, &c.,

(Signed) J. KING,

Acting Under-Secretary to Government.

No. 991.

Extract from the proceedings of the Government of Bombay, in the Revenue Department, dated 11th March 1867.

Read the following papers :—

Letter from W. Walton, Esq., in charge office of Cotton Commissioner, to J. W. Hadow, Esq., Revenue Commissioner S. D., No. 175, dated 12th February 1867.

I have the honor to submit the usual statistical annual report on the cotton crop of the Southern Division for the season 1866-67, as compared with that of last year 1865-66.

2. The figures for last season are actual results; those for this year are a careful and moderate estimate.

3. The tabulated returns submitted are three in number, respectively marked A, B and C, as follows :—

A—Statement of cotton cultivation and the estimated outturn of the crop for the season 1866-67, compared with that of 1865-66.

B—Is an abstract of the above statement, and is intended to show at a glance the estimated difference between extent of cultivation and out-turn of crop of the present season compared with that of last year; and

C—Is an abstract of the return furnished by the Collector of Dharwar, which not only contains very much useful information to all concerned in the cotton trade, but it is also a carefully compiled estimate of the crop of by far the most important cotton producing district in this Presidency.

4. I will now proceed to remark on the table generally, and afterwards submit a few observations on each zillah in the order that they are named in the returns.

5. The 1866-67 season has been a much more favourable one for cotton in the Southern Division than its predecessor, and we shall have a considerably larger crop from every zillah (excepting Belgaum) than we had last year. The crop will also be superior in quality and fibre.

6. The season's increase in cultivation is acres 94,404, goontas 23¾, made up as follows :—

	Acres.	Goontas.
Increase in culture of exotic cotton	46,473	34
Ditto indigenous ditto	47,930	29¾
Total	94,404	23¾

7. The increase of planting with exotic cotton is thus over *seventeen* per cent., whilst that of the native variety is a little more than *seven* per cent.

8. Compare this with the out-turn, the estimated increase in crop is (candies of 784 lbs. each) candies 13,756 lbs. 614¼, comprised as follows :—

	Candies.	lbs.
Increase in out-turn of exotic cotton	5,723	241
Ditto indigenous ditto	8,033	373¼
Total	13,756	614¼

9. This shows an increase of exotic cotton of over *twenty-seven and a half* per cent., whilst that of indigenous is a little more than *twenty-one and a quarter* per cent.

10. The next consideration is the *comparison* of out-turn. In the year 1865-66 acres 268,973, goontas 1, sown with *exotic* cotton gave candies 20,716, lbs. 540, of staple, which is an average of over *sixty* pounds of cleaned cotton per acre; whilst acres 684,039, goontas 38, planted with *indigenous* cotton yielded candies 37,593, lbs. 585, which is but a little over *forty-three* pounds per acre.

11. In the season 1866-67 acres 315,446, goontas 35, are sown with *exotic* cotton, and the out-turn is moderately estimated at candies 26,439, lbs. 781, which is an average of a little less than *sixty-six* pounds of clean staple per acre, and acres 731,970,

goontas 27¾, planted with *indigenous* cotton, it is calculated will give candies 45,627, lbs. 174¼, which averages nearly *forty-nine* pounds per acre.

12. In looking at this comparative estimate of average out-turn, it should be borne in mind that the season of 1865-66 was an extremely bad one for cotton cultivation in the Southern Division, whilst that of the current year is, generally speaking, a favourable one. If this is considered, it will be at once allowed that the estimate of this season is made at a very moderate rate.

13. To revert to the comparison between the out-turn of the exotic and indigenous varieties. With an extremely small deduction, in fact so small as not worth bringing into account, the whole of the exotic grown is acclimatized New Orleans cotton, and a glance at the foregoing paragraphs shows how very much more profitable it is to plant that description of staple in lands that are suitable for it than it is to sow indigenous seed; not only is the yield of New Orleans so very much more per acre, but its value in the market is considerably greater than indigenous cotton. I shall be able to demonstrate this still more fully in my remarks on the Collector of Dharwar's interesting return.

14. The Cotton Supply Association persistently press upon the Indian public that they should plant New Orleans seed, and, where the description will grow, ascertained results clearly prove that the Association is right. The extra out-turn not only represents a very much larger profit, but, what is of still more importance in a country where almost every acre of arable land is taken up, it is an immense saving of cultivatable area. This is proved by the fact that lands sown with *exotic* cotton yield more than *twenty-six* per cent. in *excess* of that planted with the *indigenous* variety.

15. I will now proceed to submit short remarks on each zillah in the order that they are placed in the return A.

Ahmednuggur.

16. Compared with the extent of the district, there is not much land in this zillah suitable for cotton The staple is grown in eleven Talookas, but it is only cultivated in four to any appreciable extent.

17. It will be seen that in 1865-66 no exotic cotton whatever was grown. During the present year experiments have been made with Egyptian and Peruvian in five Talookas. The season has, however, in the words of Mr. D'Oyly, the Collector, " been a very unfavourable one for cotton."

18. This is unfortunate, as a large experiment of 50 acres was made in the Jamkheir Talooka, and, notwithstanding the very unfavourable season, the produce is expected to be about 12 candies and 392 pounds.

19. I am happy to add that the Collector intends to repeat his experiments on a liberal scale, and a few days ago I received Mr. D'Oyly's indent for a considerable quantity of fresh seed.

20. Notwithstanding all the drawbacks of an adverse season, we have an increase in the total crop of nearly 726 candies, which is not far short of 75 per cent. upon the out-turn of 1865-66.

Belgaum.

21. This zillah is the only one in the division in which the crop of the season will fall short of that of last year. There are two reasons for this: firstly, the unwillingness of the ryots to risk cotton after the disheartening effect of two consecutive seasons of comparative failure caused by scanty rainfall, and the other—and by far the most important cause—the fact of the stocks of all kinds of grain being nearly completely exhausted. For this latter reason large tracts of country that under ordinary circumstances would have been planted with cotton were sown with grain.

22. In exotic there is a considerable falling off. I trust, however, that the decrease of cultivation will only be temporary. I hope to shortly arrange the establishment of a gin-repairing factory in the northern part of the Dharwar districts adjoining those portions of Belgaum which are suitable for New Orleans cotton. Such a factory will revive the culture, and, after careful arrangements are made to distribute pure picked seed, we may expect not only a larger but a better cultivation of exotic cotton than has yet been carried out. I should explain that all the foreign cotton grown in this Collectorate is acclimatized New Orleans.

23. The out-turn of indigenous cotton is considerably less than last year. The decrease of 1866-67 amounts to upwards of 67½ per cent. on the crop of 1865-66.

Dharwar.

24. An inspection of the return A will at once show that this is by far the most important cotton district of the division, and I may add, of the whole Presidency.

25. The season's crop of exotic cotton thoughout the entire Division is nearly twenty-six and a half thousand candies, the whole of which, with the exception of about eight hundred and fifty candies, is produced in Dharwar.

26. Mr. Reid, the Collector of the zillah, has provided me with the most complete return, that I have ever received from any Collectorate, and, considering the importance of the district and its large cotton trade, I have with this report submitted an abstract of the Collector's valuable paper.

27. It will be perceived that the increase of area cultivated is no less than acres 44,450, goontas 23; the total extent of cotton cultivation being acres 466,438, or nearly 500 acres in excess of the average of the last five years. When this is considered, it should be remembered that the five years (of which the mean has been taken) include the period of the speculative cotton planting that was brought about in Dharwar by the American civil war.

28. I would now solicit attention to the extent of land "capable of producing cotton." This is acres 1,168,153, goontas 36. Cotton, wherever it is treated as an annual, cannot, like many other yearly crops, be profitably sown season after season in the same ground. The system of sowing different crops in rotation must be followed out, and in this zillah the land should not have cotton planted upon it oftener than once in three years. This would give one-third of the area suitable for each season. The return shows that the ground planted this year is considerably more than a third part, and it thus proves that the Collectorate is in cotton cultivation now fully up to the maximum of what it ought to bear.

29. I now come to the "yield," and will view the exotic and indigenous separately. The increase in out-turn of the former is well over 5,000 candies, or more than 25 per cent. increase on last year's crop, whilst that of Native cotton is under 300 candies, or less than 3½ per cent. more than last season. This satisfactorily shows what a very favourite corp New Orleans cotton has become with the ryots.

30. I would with regard to the out-turn beg a comparison with the average of the last five years. This shows that the season's crop of *exotic* is 6,483 candies, or nearly 34 *per cent.* over the average, whilst that of indigenous 1,955 candies *less*, or more than 21½ per cent. below the average. This surely should be entirely satisfactory to the strongest advocate of increasing American cotton cultivation.

31. I will here consider the profit returned to the cultivator in this highly important cotton district. The following are the averages per acre: the ryots mean expenses are as follows:—

Exotic Cotton—Cost.

Government assessment	Rs.	0	14	$11\frac{1}{2}$
Cost of cultivation (this includes agricultural implements, cost of cattle, &c.)	„	4	12	$4\frac{1}{2}$
Cost of ginning, say, 65 lbs. of cotton...	„	0	12	0
Cost of packing ditto	„	0	12	0
Total Rs.....		7	3	$3\frac{1}{2}$

Exotic Cotton—Return.

Sale price of 65 lbs. cotton.....	Rs.	17	0	0
Ditto. say 120 lbs. seed, after deducting proportion for sowing	,	3	0	0
Total	„	20	0	0
Deduct—				
Cost Rupees $7\text{-}3.3\frac{8}{12}$, or to cover every contingency, say	Rs.	7	8	0
Rupees.....		12	8	0

32. This shows that a profit remains of Rupees 12-8-0 per acre.

33. The statement with indigenous cotton gives the following result per acre:—

Indigenous Cotton—Cost.

Government assessment	Rs.	0	14	$11\frac{1}{2}$
Cost of cultivation	„	4	12	$4\frac{1}{2}$
Ditto of ginning 45 lbs., say.....	„	0	8	0
Ditto of packing ditto.	„	0	8	0
Rupees.....		6	11	$8\frac{1}{2}$

Indigenous Cotton—Return.

Sale price of 45 lbs. of cotton	Rs.	9	8	0
Ditto, say, 120 lbs. of seed, after deducting proportion for sowing.....	„	3	8	0
Rupees.....		13	0	0
Deduct—				
The cost, say.....	„	6	12	0
Rupees ...		6	4	0

34. There thus remains a profit of Rupees 6-4-0 per acre.

35. These enquiries give a clear *profit* to the ryots (*exclusive* of that made by cotton Agents, Brokers, &c.,) of, in round numbers, Rupees 44,51,283, comprised as follows:—

Exotic cotton, at Rupees 12-8-0 per acre.....	Rs. 34,54,349
Native cotton, at Rupees 6-4-0 per acre.....	,, 9,96,934
Rupees.....	44,51,283

36. When these figures are considered it should not be forgotten that cotton has considerably risen in price since the Collector's return was compiled, and the probability is that the ryots will realize higher rates for their produce than those quoted.

37. On looking over the above results it would naturally be asked why the cultivators do not plant the whole of their land with exotic in preference to indigenous cotton. The main reason is that there is a considerable quantity of ground which suits the Indian plant in which New Orleans grows but indifferently.

38. It will be observed that the expense of cleaning the two cotton is the same. If it had not been for the saw-gin, the cost of cleaning by foot-roller would undoubtedly have been much higher. The gin, in addition to economizing labour, has also kept down the rate for cleaning native cotton. If the expense of ginning indigenous cotton got much higher, there is no doubt but that, wherever practicable, the cultivators would desert the cultivation of the indigenous for the exotic variety. Thus, in order to retain their employment, the people who work the foot-rollers keep their rates down to the level of those charged by the proprietors of saw-gins.

39. There is much more in Mr. Reid's valuable return that is well worth the attention of all interested in cotton, such as local consumption, quantity exported, the various interesting estimates for the last five years, &c., and I would respectfully suggest that the paper be made accessible in the usual manner to the Chamber of Commerce and other different bodies engaged in the trade.

40. Before concluding my remarks upon the Dharwar zillah, I would take the opportunity of mentioning that I have since the monsoon built two new (branch) factories for keeping cotton machinery in order. These are placed at very important towns, the centres of rich cotton districts—one at Bunkapoor, and the other at Ranebidnoor. The latter will, I trust, in addition to great good in the Dharwar districts, encourage and increase the

cultivation of New Orleans cotton in the Mysore State. Both places will be in full work before the expiration of the current month.

41. The most gratifying circumstance connected with these factories, and one which gives a guarantee of how firm the Dharwar exotic cotton trade must be, is the fact that these two new Establishments will not cost Government a single Rupee either for establishing or keeping up. The whole expense has been voluntarily subscribed by the ryots themselves.

42. In consideration of the liberal manner in which my endeavours have been met by the merchants, I have arranged that the central of both these places shall, as far as is practicable, be in the hands of the subscribers themselves. The executive central of each will be under the guidance of a carefully selected local Punchayet.

Kulladghee.

43. In this zillah New Orleans cotton is acclimatized, and the cultivation is rapidly increasing. In 1865-66 the out-turn was a little more than 196⅓ candies; this season it is nearly 806, showing an increase of about 610 candies, or upwards of 300 per cent.

44. I travelled through these districts a short time ago, and I myself picked in immense large fields New Orleans cotton equal both in quality and yield to the best I have ever seen in Dharwar.

45. To keep up and increase this cultivation a gin-repairing factory is needed. I now have the project in hand, and trust my measures will soon be sufficiently matured to submit a detailed proposition.

46. In travelling through the district I regretted to find that an attempt had been made to introduce Berar cotton. In a Collectorate which will grow such very superior American cotton as Kulladghee will, I consider it was a mistake to try to acclimatize so (comparatively) inferior a staple as that styled "Berar." I have already submitted to you a copy of my suggestions to the Collector on the subject.

47. I found the Kulladghee indigenous cotton of superior quality: the increase of the year's crop is upwards of 27½ per cent.

48. The condition of the saw-gins in this district is wretchedly bad, and I am now endeavouring to do what I can to effect an improvement by deputing workmen from Dharwar and Gudduck to put the machines in order. All the gins I saw worked cut up the staple so abominably that, notwithstanding its being very

superior cotton, I doubt if the owners will, from this cause *only* realize a higher price for their American cotton than they do for the ordinary indigenous.

49. The arrangements I have made to counteract this are of course but temporary, and to keep up the trade as it ought to be kept a small factory is indispensably required without loss of time. Such a factory would undoubtedly increase the cultivation of American cotton in this district to a very large extent. With all the present discouraging influences, it will be perceived that the culture has during this season increased over 300 per cent.

Poona.

50. I received from the Collector of this zillah a very full and interesting return. The district is, however, as regards cotton a comparatively unimportant one from the limited quantity of land within it that is suitable for cultivating the staple.

51. There are only two Talookas in which cotton is grown and only in one of them to any appreciable extent.

52. A fairly large experiment has been made with exotic, and, Mr. Down the Collector, has favoured me with samples of the produce. I will report upon these in due course. Experiments will be repeated next season, the Collector having already applied for a supply of fresh seed.

53. The culture of indigenous cotton in the Poona zillah is rapidly increasing. Last year's crop was only 1,666 candies; this season it is 2,014, which gives an addition for the year of over 21 per cent., and an increase on the last five years' average of no less than upwards of 140 per cent.

54. I travelled through Indapore lately, and it struck me that the cotton there is not only very carelessly tended, but it is also sown much too closely. If the ryots could be prevailed upon to plant a little thinner, and pay more attention to weeding and surface harrowing, a great improvement would be the result both in yield and quality.

55. The cultivators here have two very decided advantages over the ryots of Dharwar and other southern districts; they get their cotton cleaned and conveyed to a market at about half the cost of what prevails in the southern Mahratta country.

Sattara.

56. In this Collectorate no exotic cultivation is named in the return. Some interesting experiments were, however, made in municipal grounds and other places by the second assistant Collector, Mr. Wilson.

57. Large experiments will be made this season. Mr. Arthur has already indented for a fairly liberal supply of New Orléans seed.

58. There is a satisfactory increase in the out-turn of indigenous cotton. Against a crop in 1865-66 of 3,788 candies we have in 1866-67 yield of 4,142, which is an addition of about 9 per cent.

Sholapoor.

59. In this district no exotic cotton has been grown for the last two years. The present Sub-Collector (Mr. Jacomb), however, intends to take up the subject this season, and has applied for seed for experiment.

60. With the indigenous variety there is a very large and satisfactory increase for the year of about 85 per cent.

61. I travelled down through these districts last month, and the remarks contained above in my 54th paragraph regarding Poona apply equally to the cotton lands of *Sholapoor*.

62. As the cotton trade is always much affected by the prices and stocks of grain, I think it would be as well if I here noticed how far this cause is likely to bear upon next season.

63. Taking the division generally, the culture and out-turn of grain crops have been this year very large. In fact, so much so that in many places the cultivators told me that they had reaped this season what they might term two average annual crops.

64. This has, of course, had a very considerable effect on prices: for instance, in a space of not more than six weeks Jewarry in the town of Dharwar cheapened from 16 to 55 lbs. the Rupee.

65. It is, of course, very difficult to express any decided opinion yet upon the prospect of next season, but considering the liberal stock of grain there is now in most parts of the division, there can be but little doubt but that, should the price of cotton keep up to fairly remunerative rates, we may expect liberal planting this year.

66. I had hoped to submit this report to you simultaneously with one on the Northern Division to Mr. Rogers. I have, however, still to await the arrival of some returns, and until their receipt I shall not be able to report to the Revenue Commissioner N. D.

67. When I was in Bombay a short time ago the Chamber of Commerce expressed a strong wish that these returns should be

published as early as practicable. For this reason I beg the favour of your handing on this letter and enclosures to Government at your early convenience, without awaiting the report for the Northern Division.

68. In my letter to Mr. Rogers I will submit a short review on the crop of the whole Presidency.

69. In future the detailed annual reports will be the only ones submitted in the manner hitherto in force; the others will be published direct in the *Government Gazette* in the manner laid down in orders of Government, Revenue Department, No. 217, dated 16th ultimo.

A

Return of Cotton Cultivation and the estimated out-turn of the Crop for the Season 1866-67, *as compared with that of* 1865-66, *in the Southern Division of the Bombay Presidency.*

NAME OF ZILLAH.	Cotton Crop for the Seasons.												
	1865-66.						1866-1867.						
	Extent of Cultivation in Acres.			Actual Produce in Candies of 784 lbs. of clean Cotton.			Extent of Cultivation in Acres.			Estimated out-turn in Candies of 784 lbs. of clean Cotton.			
	Of Exotic Cotton.	Of Native Cotton.	Total.	Of Exotic Cotton.	Of Native Cotton.	Total.	Of Exotic Cotton.	Of Native Cotton.	Total.	Of Exotic Cotton.	Of Native Cotton.	Total.	
	Acres. Gts.	Acres. Gts	Acres. Gts.	Candies. lbs.	Candies lbs	Candies lbs	Acres. Gts.	Acres. Gts	Acres. Gts	Candies. lbs	Candies. lbs.	Candies. lbs	
Ahmednuggur ...	.. ...	6,604 30½	6,604 30½	... ..	1,075 544½	1,075 544½	50 8	11,146 17	11,196 25	12 432	1,788 400	1,801 48	The season has been a very unfavourable one for cotton in the Collectorate.
Belgaum	3,730 6	163,676 37	167,407 3	118 120	3,579 563	3,697 683	1,865 ...	130,810 28	132,675 28	31 626	2,149 218	2,181 60	The return does not include Jagheer lands.
Dharwar	261,942 21	160,044 38	421,987 19	20,397 692	8,782 417	29,180 325	304,688 19	161,749 21	466,438 ..	25,588 409	9,079 722	34,668 447	* The decrease in cotton cultivation in the year 1866-67 is owing partly to the cultivators having had last year an out-turn far short of their expectations in consequence of the scanty fall of rain, and partly to the exhaustion of their stock of grains.
Kulladghee	3,268 6	278,494 17	281,762 23	196 472	16,936 489	17,133 177	8,823 6	262,275 ...	271,098 6	805 700	20,797 555	21,603 471	
Poona	 15	5,317 21	5,317 36	 40	347 669½	347 709½	20 2	32,599 38	32,620 ...	1 132	2,014 141½	2,015 323½	
Sattara	29 33	21,554 15	21,584 8	4 ..	3,788 204	3,792 204	.....	44,718 26	44,718 26	.....	4,142 509	4,142 509	
Sholapore	.....	48,346 39½	48,346 39½	.. ...	3,083 50	3,083 50	.....	88,670 17½	88,670 17½	.....	5,654 765	5,654 765	
Grand Total...	268,973 1	684,039 38	953,012 39	20,716 540	37,593 585	58,310 311	315,446 35	731,970 27½	1,047,417 22½	26,439 781	45,627 174½	72,067 171½	

* This remark relates to *Kulladghee*; the copyist has in mistake put it opposite Dharwar.

W. WALTON,

In charge Office of Cotton Commissioner.

Cotton Commissioner's Office, Camp Hooblee, 12th February 1867.

153-154

B

Abstract of Cotton Return of the Southern Division of the Bombay Presidency showing the estimated difference between extent of cultivation and out-turn of Crop of the year 1865-66 *as compared with that of* 1866-67.

Seasons.	Extent of Cultivation in Acres						Out-turn in Candies of 784 lbs. of cleaned Cotton.						Remarks.
	Of Exotic Cotton.		Of Native Cotton.		Total.		Of Exotic Cotton.		Of Native Cotton.		Total.		
	Acres.	Goontas.	Acres.	Goontas.	Acres.	Goontas.	Candies	lbs.	Candies	lbs.	Candies	lbs.	
The year 1865-66 ...	268,973	1	684,039	38	953,012	39	20,716	540	37,593	585	58,310	341	
The year 1866-67 ...	315,446	35	731,970	27¾	1047,417	22¾	26,439	781	45,627	174¼	72,067	171¼	The Return of 1865-66 is "actual result," that of 1866-67 is a moderate estimate.
Less than 1865-66...	.....	...	.....	...	.....	None.	.....	...	...	...	...	..	
More than 1865-66..	46,473	34	47,930	29¾	94,404	23¾	5,723	241	8,033	373¼	13,756	614¼	

W. WALTON,
In charge office of Cotton Commissioner.

Cotton Commissioner's Office Camp Hooblee, 12th February 1867.

Abstract of Return, by Lestock Reid, Esq., (Collector of Dharwar), of the Cotton Crop of 1866-67 of the Dharwar Zillah, compared with that of the preceding ye

Season.	Localities.	Extent of land capable of producing Cotton in Acres and Goontas.	Extent Cultivated.							Uncleaned Cotton produced in Candies of 784 lbs. each.			Yield of cleaned Cotton in Candies of 784 lbs. each.			Local Consumption.		
			Government Land.	Inam Land.	Consisting of				Total Extent of Cotton Cultivation.									
					Indigenous Cotton.		Exotic Cotton.											
					Government Land.	Inam Land.	Government Land.	Inam Land.		Indigenous.	Exotic.	Total.	Indigenous.	Exotic.	Total.	Indigenous in Candies.	Exotic in Candies.	Indigenous in Candi
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1866-1867 ...	Totals of Eleven Government Talookas	1,146,150 15	295,835 30	161,082 8	104,406 32	55,486 6	190,928 38	105,546 2	456,367 38	36,007 92	74,835 243	110,842 336	9,001 609	24,945 79	33,946 688	2,228 99	 224	6,773
	The Savanoor and Hebblee Jagheers	22,003 21	6,612 27	3,457 15	1,355 3	501 20	5,257 24	2,955 35	10,070 2	342 455	1,930 207	2,242 662	78 113	643 330	721 443	78 113	.....	.....
	Grand Totals..... ..	1,168,153 36	301,948 17	164,539 23	105,761 35	55,987 26	196,186 22	108,501 37	466,438 ...	36,349 547	76,765 450	113,085 214	9,079 722	25,588 409	34,668 347	2,306 212	 124	6,773
1865-1866 ...	Totals of Eleven Government Talookas	1,146,150 15	269,751 4	144,770 10	104,984 37	53,846 30	164,788 33	90,950 34	414,521 14	34,902 679	61,666 111	96,569 6	8,722 745	19,822 389	28,548 350	2,282 636	.....	6,535
	The Savanoor and Hebblee Jagheers	22,003 21	4,631 17	2,834 26	882 30	430 19	3,798 26	2,404 8	7,466 3	234 247	1,720 706	1,955 169	58 456	573 303	631 759	39 788	.....	18
	Grand Totals.....	1,168,153 36	274,382 21	147,604 36	105,767 27	54,277 9	168,587 19	93,355 2	421,987 17	35,137 142	63,387 33	98,524 175	8,782 817	20,397 692	29,180 325	2,322 590	.....	6,554
Less than in 1865-66		.....	.....	.....	5 32	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16 378	.....	.....
More than in 1865-66		.....	27,565 26	16,885 27	.....	1,710 17	27,599 3	15,146 35	44,450 23	1,182 406	13,378 417	14,561 39	297 365	5,190 501	5,488 22	.....	 124	219
Estimated averages for the last five years		888,394 3	294,606 10	171,361 7	133,688 14	72,647 7	160,917 37	493,570 ...	465,967 17	52,939 248	57,818 372	110,257 620	11,084 649	19,105 751	33,466 772	3,337 779	.....	9,896

Cotton Commissioner's Office, Camp Hoobleo, 12th February 1867.

156-157-158

Exported.		Gross Revenue of Government Land.	Deduct remissions in Government Land.	Remainder Government Land.	Mean Rate of Assessment per Acre.	Mean Cost of Cultivation per Acre.	Mode and Cost of Cleaning.	Average price of cleaned Cotton per Candy of 784 lbs.	Expense of transit to Bombay per Candy of 784 lbs.	Remarks.
ds.	Exotic in Candies.									
	20	21	22	23	24	25	26	27	28	29
510	24,944 739	2,59,142 7 1	15 0 0	2,59,127 7 1	0 14 11 4/12	4 12 4 4/12	New Orleans (exotic) is cleaned by the Saw-Gin, and indigenous by the Foot Roller. The cost of cleaning is Rs. 9 each kind per candy.	The average price of New Orleans is Rs. 204, and that of indigenous Rs. 165 per candy.	About Rs. 25.	All candies noted in this return are of 784 lbs. each.
	643 330	21,697 1 6	.....	21,697 1 6	.....	.....				
510	25,588 285	2,80,839 8 7	15 0 0	2,80,824 8 7	.....	.....				
377	19,829 213	2,41,403 13 9	34 8 0	2,41,369 5 9	0 14 7	4 14 1 10/12	New Orleans (exotic) is cleaned by the Saw-Gin, and indigenous by the Foot Roller. The cost of cleaning is Rs. 11, each kind, per Candy.	The average price of New Orleans is Rs. 316, and that of indigenous Rs. 260 per candy.	About Rs. 32.	All the cotton in this return named "Exotic" and "New Orleans" is what is properly called Dharwar acclimatized New Orleans cotton.
501	573 303	15,634 14 11	.....	15,634 14 11	.....	.....				
294	20,402 516	2,57,038 12 8	34 8 0	2,57,004 4 8	.....	.....				
	.....	.....	19 8 0	.....	.....	.....				
116	5,185 553	23,800 11 11	.....	23,320 3 11	.....	.....				
554	19,106 124	2,58,563 9 1	4 12 0	2,58,558 13 1	.....	.....				

W. WALTON,

In charge Office of Cotton Commissioner.

Memorandum by J. W. Hadow, Esq., Acting Revenue Commissioner S. D., No. 672, dated 22nd February 1867.

Submitted for the information of Government, with reference to their resolution No. 2947, dated the 11th July 1865.

2. As regards paragraph 46 of Mr. Walton's letter, the Collector of Kulladghee has been requested to report the circumstances under which it was considered desirable to introduce the variety of cotton known as Berar into his Collectorate, and on receipt of Mr. Armstrong's reply it will, if necessary, be communicated to Government

RESOLUTION.—Copies of these papers to be furnished to the Government of India, the Cotton Supply Association, and the Chamber of Commerce, and to be laid on the Editors' table.

Ordered that copies of the above be forwarded to—

The REVENUE COMMISSIONER, S. D.,

The SECRETARY, MANCHESTER COTTON SUPPLY ASSOCIATION.

The CHAMBER OF COMMERCE, BOMBAY.

(Signed) F. S. CHAPMAN,
Chief Secretary to Government.

No. 38 of 1867.

Bombay Chamber of Commerce,
18th March 1867.

To the Acting Under-Secretary to Government,
Revenue Department, Bombay.

SIR,—I am directed by the Committee of Management of the Chamber of Commerce to acknowledge the receipt of your letter of the 11th instant handing extract from the proceedings of Government No. 991, comprising a report by Mr. Walton on the cotton crop of the Collectorates of the Southern Division of the Presidency for the season 1866-67.

In reply I am directed to express the best acknowledgments of the Committee for the interesting information communicated in the report, and respectfully to express the opinion of the Committee that if in future Government should be able to publish similar reports from all the Collectorates in the Presidency and at a somewhat earlier date—the information would be a great boon to the mercantile community.

I have the honor to be, &c.

(Signed) JAMES TAYLOR,
Secretary.

26 cc.

No. 1235 of 1867.

REVENUE DEPARTMENT.

Bombay Castle, 27th March 1867.

To the Secretary to the Chamber of Commerce, Bombay.

SIR,—I am directed by His Excellency the Right Honorable the Governor in Council to forward herewith, for the information of the Chamber, an extract from the proceedings of this Government of this date, No 1234, comprising a report by Mr. Walton in charge office of Cotton Commissioner, on the cotton crop of the Collectorates in the Northern Division of this Presidency for the season 1866-67.

I have the honor to be, &c.,

(Signed) H. E. JACOMB,

For Chief Secretary to Government.

No. 1234.

EXTRACT from the proceedings of the Government of Bombay, in the Revenue Department, dated 27th March 1867.

Read the following papers :—

Letter from A. Rogers, Esq., Revenue Commissioner N. D., to F. S. Chapman, Esq., Chief Secretary to Government, Bombay, No. 1115, dated 14th March 1867.

I have the honor to submit, for the information and orders of Government, the annual report of the acting Cotton Commissioner on the cotton crop of the Northen Division for the season of 1866-67.

2. It will be seen that on the whole the return is highly favourable, the greater breadth sown in the year under report than in the preceding season having considerably more than made up for a deficiency of crop in some places owing to the unfavourable nature of the season. It is most satisfactory to observe that the increase is entirely in cotton which, if it cannot strictly be called exotic, is yet of an improved marketable staple. What an effect this must have upon the trade of the country, and to what extent it must tell upon the prosperity of the producing classes, may be estimated from the fact that the increase alone represents, at Rupees 250 a candy, about £637,500, and the out-turn of the whole season's crop more than 19 millions of money. I think that it is very important that simple facts like this should be made as widely known as possible, and would beg to suggest that Mr.

Walton's report should not only be furnished to the Chamber of Commerce, but also be placed in Editors' room, with a view to publication by the press.

3. Mr. Walton reviews the results in each Collectorate in detail, so that it is unnecessary for me to do more than refer to his figures. It will be seen from these that of the four cotton-producing Collectorates, Kaira is the least important as far as this staple is concerned. It is true that there is much land suitable for cotton in the district which is now not sown with it, but the question of its being applied to that description of crop or not is one merely of price: at present the tobacco, sugar-cane, &c., grown in the Kaira Collectorate are far more remunerative than the finest varieties of cotton ever yet grown in this country can hope to be.

4. The progress made in the erection of factories for cleaning and pressing cotton, as well as for spinning, up-country is highly encouraging. The number of these has only been given in the report for Goozerat, but it must not be thought that Khandeish is behind hand in this particular. Some of the factories established at Julgaum and other places on the G. I. P. Line have been thrown back by the late mercantile depression in Bombay, a state of matters which will pass away with the return of her merchants to legitimate trade. But undoubtedly the chief cause of public attention having been turned to Khandeish less than to Guzerat as the site of such undertakings has been the hitherto worthless nature of the staple procurable in the former. This defect has now been remedied by the extirpation of the old cotton and the complete introduction of the Berar variety, and there is every prospect of a grand future for the province, with its large area suitable for the crop still unappropriated to it, as a cotton producing and manufacturing country.

5. I would beg here to throw out a suggestion which may be useful to capitalists introducing machinery into this country. It is that the steam power they may use should be capable of being applied to machinery of more than one kind, and thus of being employed all the year round, instead of for only a limited time. A cotton ginning and pressing factory must close work by the commencement of the monsoon, because there is by that time no more cotton in the market, but there is no reason why the steam power should not then be turned to profitable use for the manufacture of oil, either from the cotton or other seed, for the grinding of corn, for the sawing of wood, or, from November until the cotton season came round again, for pressing sugar-cane wherever that is produced. The wastefulness of allowing machinery that

could always be turned to profitable use to lie idle for more than half the year is too palpable to need more than a passing notice.

6. The success that has attended the few agricultural exhibitions that have of late been held in this country induces me to suggest the stimulus that might be given to the production of superior varieties of cotton by the holding of such an exhibition annually, at which prizes might be given for the best samples exhibited, in the heart of the cotton country, say at Broach itself. The exhibition would afford a convenient opportunity also for showing at work various descriptions of agricultural machinery, which, from the great accessibility of the place by rail, would be inspected both from north and south by thousands of notoriously the most industrious and intelligent agriculturists in Western India, and lead to the productive powers of the land being utilized to the utmost in a country in which cultivation has in many parts almost reached its extreme limits, from there being but little land left to till. If Government approve of my suggestions, and will state to what extent the local authorities may expect assistance in carrying it out, the details of a scheme will be matured and laid before them for sanction. It is patent to the world that Guzerat has met with the very smallest amount of help from the State in the way of developing its resources, and it is but a trifle of what is due to the province to ask for a few thousand rupees out of a land revenue of more than 91 lacs a year to enable it to see how it can develope them itself.

Letter from W. Walton, Esq., acting Cotton Commissioner, Dharwar, to A. Rogers, Esq., Revenue Commissioner N. D. No. 279, dated 28th February 1867.

I have the honor to submit the usual statistical annual report on the cotton crop of the Northern Division for the current season 1866-67, as compared with that of last year, 1865-66.

2. The figures entered for last year are actual results, those that are compiled for the present season are careful and moderate estimates.

3. The tabulated returns submitted are three in number, respectively marked A, B, and C: they are as follows:

A—A statement of cotton cultivation with the estimated out-turn of crop for 1866-67, compared with the actuals of 1865-66.

B—Is an abstract of the statement A, and is framed so as to show at a glance the estimated difference between

extent of cultivation and out-turn of crop of the present compared with that of last season ; and

C—Is a similar statement for the whole Presidency. This last, however, will be remarked upon after completion of the details regarding the division.

4. I will now proceed to submit observations on the two tables A and B, and afterwards take up each zillah in the order that they appear in the return A.

5. Notwithstanding heavy rain that fell in the Guzerat cotton districts after sowing was completed, the returns show that the season has been a more favourable one for cotton than its predecessor. The crop will also be a superior one in quality.

6. The season's gross increase in cultivation is 172,979 acres, 22¼ goontas. This is arrived at as follows :—

	Acres.	Goontas
Increase in culture of exotic cotton	216,752	21¼
Deduct—		
Decrease in culture of *indigenous* cotton	43,772	39
Increase Acres.....	172,979	22¼

7. The increase in planting *exotic* cotton for the year is that over 98½ per cent., whilst in the culture of indigenous we have a decrease of a little more than 8 per cent.

8. It should, however, be noticed that the increase in exotic includes 216,730 acres, 3¼ goontas, in the Khandeish zillah, and the cotton mainly planted is one *not* foreign to India, but merely to that particular district. This will be explained more at length in the remarks on the Khandeish Collectorate.

9. I now come to the gross increase in out-turn : this is—

	Candies	lbs.
Increase in *exotic* cotton	30,622	304
Deduct—		
Decrease in *indigenous* cotton	5,108	519
Actual increase in crop, candies	25,513	569

10. This shows an *increase* in the out-turn of exotic of nearly 370 per cent., and a *fall off* in indigenous of about 12 per cent.

11. The next consideration is a *comparison* of out-turn for the two years; in 1865-66, 219,615 acres, 14 goontas, sown with exotic cotton yielded 8,326 candies, 766 lbs., which is an average

of nearly 30 lbs. per acre, whilst 538,170 acres, 4 goontas, planted with indigenous cotton yielded 42,540 candies 706 lbs., which is over sixty pounds an acre, or double the exotic.

12. In 1866-67, 436,367 acres, 35¼ goontas, are sown with exotic cotton, and the yield is estimated at 38,949 candies, 286 lbs., or nearly 70 lbs. per acre; and 494,397 acres, 5 goontas, planted with native cotton give 37,432 candies, 187 lbs. of staple, which is slightly over 59 lbs. an acre.

13. The above for 1865-66 is such an unusual result that it requires explanation. An examination of the Collectorate returns shows that by far the greater part of the exotic cultivation was carried out in Khandeish. The Collector there, Mr. Ashburner, as Government are already aware, introduced a superior cotton from Berar, and I conclude from that gentleman's return that the yield of staple from the first planting, notwithstanding its success, must have been small, and that this year, owing to its having become acclimatized (aided by a more favourable season), a largely increased average yield has been brought about.

14. It will be perceived that for 1866-67 the *yield* of exotic is considerably in excess of that of indigenous cotton, and it may be accepted as a rule that superior kinds of cotton will always give larger crops than inferior descriptions.

15. I will now briefly remark on each Collectorate, and, in addition to information regarding the crop, I will add a few particulars that I gathered on a tour I made lately through Guzerat, mainly regarding the improved means available in that district for ginning and packing the staple.

Ahmedabad.

16. It will be perceived that this zillah is the only one in which there is a decrease of crop. The fall off appears considerable but such in reality is not the case. The actual decrease is, if anything, but very small, as will appear from the following. In the Collector's return Mr. Oliphant remarks—"Decrease in area this year is owing to the transfer of certain Talookdaree villages of Bhownuggur to Rajkote jurisdiction." On examining last year's return I find this transfer of territory has caused a difference to Ahmedabad of at least 6,000 candies of cotton, which is close upon the total amount of apparent decrease of crop. This will not ultimately affect the supply for Bombay, as the cotton grown will, of course, find its way to the port of shipment, no matter under what jurisdiction it is cultivated.

17. Experiments with exotic cottons and those of superior descriptions have been carried out on an extended scale. In

1865-66 only 5 acres were planted, whilst in the year under review nearly 18 acres were taken up with experiments.

18. The cottons that have been principally tried are New Orleans and Egyptian, and the results of both are sufficiently favourable to afford great hopes for the future.

19. I am indebted to the courtesy of the Collector, Mr. Oliphant, and the cotton inspector, Major Moore, v. c., for very interesting detailed particulars of the two most important of these experiments.

20. With Egyptian a large planting was undertaken by Mr. Whittle at Verumgaum, the centre of a very important cotton district, about 40 miles distant from the city of Ahmedabad.

21. I have sent sample of the staple produced to the Cotton Supply Association, and when their report is received I will submit full particulars to you, together with an interesting and practical letter that has been written upon the subject by Mr. Whittle to Mr. Oliphant's address.

22. Large field experiments with New Orleans and Egyptian were also carried out by Mr. Nowrojee Pestonjee at Jaspoor, near Ahmedabad.

23. I personally visited the place, and after a careful examination I feel convinced that the cultivation of New Orleans and Egyptian cottons can be successfully and profitably undertaken in Guzerat.

24. As soon as I receive samples that have been promised by Mr. Nowrojee Pestonjee, I will procure a report on the cottons from Manchester, and will afterwards submit full particulars to you, together with long and interesting detail furnished by Mr. Nowrojee.

25. I trust that during next season experiments will be still further extended. I am certain they will receive all proper encouragement and assistance from Mr. Oliphant and Major Moore. A large quantity of exotic seed has already been applied for to be sent to the latter officer

26. It may prove useful if I now give a short sketch of what I ascertained has been done in this important zillah to improve the cleaning and packing of cotton.

27. At Verumgaum, 40 miles from the Sudder station, the Guzerat Cotton Cleaning Company has established a factory under the management of Mr. Whittle. The Establishment contains 80 of Platt's Macarthy patent roller gins and is worked by two engines of the nominal power of 20 horses.

28. The gins each clean from 160 to 200 lbs. of cotton daily The staple they turn off is packed by the well known Guzerat Wooden Screw Press into packages containing 61 cubic feet, the weight varying from 5½ to 6½ cwt. per bale.

29. At Ahmedabad a factory is working 38 Platt's Macarthy gins, with a steam engine of the nominal power of 12 horses. The cotton is also packed by the Guzerat Native Screw Press. Of these latter machines there are in the zillah no less than 26. They all pack bales of a uniform size of 61 cubic feet, varying in weight from 13 to 18 Bombay maunds. These presses pack the cotton cleaned by the native Churkas, in addition to the staple supplied from the steam factories.

30. In the town of Ahmedabad there is also a large spinning and weaving factory at work. This mill turns out 20s. thread. 10,000 spindles are kept going by about 500 hands daily employed, at a weekly expenditure of from Rupees 2,000 to Rupees 2,500. The mill is worked by steam engines of 40 horses power (nominal.)

31. It is satisfactory by know that the whole of the yarn manufactured in this mill finds a ready sale in the town and district.

32. I was much struck with a peculiar kind of cotton growing at and about Ahmedabad which is termed "Lallia." This description, owing to a peculiarity of soil, will only grow within a radius of a few miles round the head quarter station. Major Moore has kindly forwarded me the following particulars regarding it, and the other cottons of his district. Before proceeding I would however, remark that this "Lallia" cotton appeared to me not unlike inferior Bourbon.

33. The threee indigenous cottons grown are termed "Karnum Lallia," "India Lallia," and "Verumgaum." "Karnum" is in reality Broach seed, which when sown in Ahmedabad produces fine "Lallia" cotton. The difference between "Karnum" and "India Lallia" is that the former is grown as an annual, whilst the latter is a perennial plant.

34. "Karnum Lallia" yields 12 *to* 13 *lbs.* of clean cotton from a *maund* of kuppas containing 41¼ lbs., whilst India Lallia *gives only* 8 *to* 10 lbs.

35. With "Verumgaum," the ordinary indigenous, we have two kinds—the "Nalkuta" and Jutwad." One hundred maunds of seed cotton of the former yields 21½ maunds of cleaned staple, whilst a similar quantity of the latter gives from 23 to 24 maunds.

36. The expense of cotton cultivation throughout these districts varies from Rupees 7 to Rupees 10 per beegah.

37. Before concluding these observations on the different kinds of Ahmedabad cotton, I would remark on my above 33rd and 34th paragraphs. It will be seen that when "Lallia" cotton is grown as a perennial it *degenerates* so much that it turns out fully *thirty per cent. less* staple than when it is grown as an *annual*. Not only this, the "*Karun*," or *annual*, Lallia is a *superior* cotton, whilst the "*India*," or perennial description, is *short and coarse*.

38. These results, as well as general observations, lead me to believe that all Indian indigenous cottons deteriorate when cultivated as perennials.

Kaira.

39. This Collectorate is the least in importance of the cotton districts of the Northern Division.

40. There is a decrease in area cultivated of about 11,134 acres. The season, however, has been so much more favourable than last year that, notwithstanding the smaller quantity of land taken up, the crop is about 65 candies in excess of 1865-66.

41. No exotic cotton is grown in the zillah, nor does it possess any steam or other improved ginning factories. Kaira also has not got a single press for packing cotton. The trade has entirely to depend upon the old Churka and rudely packed "docra."

42. In my short visit to the zillah I observed much very suitable land, but the cotton appeared to be carelessly cultivated.

Surat.

43. An inspection of the return shows how very important this zillah is as a cotton-producing country.

44. The increase in area cultivated is acres 23,287, goontas 2, or 10 per cent. over last year, the extent of this season's cultivation being acres 256,157, goontas 31.

45. In the out-turn of staple we have an increase of candies 2,900, lbs. 599, the total crop being candies 74,671, lbs. 621. This is under 4 per cent. in excess of last year's yield, or an average of 6 per cent. less than the increase of area cultivated. This is mainly accounted for by unseasonably heavy rains that fell in the zillah after the crop had been planted, and which heavy fall may be remembered by the fact of some of the strongest works on the line of railway having been seriously damaged at the time.

46. It will be observed that enlarged experiments were undertaken with exotic cotton; the area taken up in 1866-67 being over *twelve*, whilst in 1865-66 it was under four acres.

47. The cotton principally tried was Egyptian, and I regret to report that the experiment has not been so successful as I think it might have been had the season been more favourable.

48. The Collector writes—"The out-turn of the Egyptian seed sown last season is reported to have been unsatisfactory and unremunerative to the cultivators, either from excess or insufficiency of rain or alleged unsuitableness of soil." Mr. Hope then goes on to state—"The out-turn was not so bad, only in a very few instances; but even the growth was equal, but not superior, to that of indigenous seed." This for a first season, considering the drawbacks that were contended with, should not be considered a very bad result; in fact, I think it so far encouraging that I will address the Collector, and endeavour to get further experiments prosecuted with the seed gathered from this season's crop.

49. I trust that experiments will also be undertaken with Peruvian cotton. The Collector writes me—"I am inclined to think that Peruvian seed would succeed better." From what I saw of the Surat zillah I agree with Mr. Hope; in fact, I not only think that this description of cotton may prove successful in this Collectorate, but also generally throughout Guzerat.

50. The principal ginning factories of the zillah are at Broach. None at present are working at the Sudder Station. The Mofussial Company has, however, established one at Randhar, near Surat. This factory works 56 Platt's Macarthy roller gins with a 15-horse power engine. The cotton it turns out is packed with a Guzerat native wooden screw press.

51. In Surat there is a large and busy steam spinning mill worked by the "Jaffuralee Spinning and Weaving Company, Limited." I went through the works several times, and always had the advantage of seeing the mill at full work.

52. To the manager, Mr. Chadwick, I am indebted for the following particulars. The mill is worked 9 hours a day. 288 men, women and children, are found in employment. These attend 9,024 spindles, worked by two engines of 60 horse nominal power; the average quantity of yarn turned off per diem is 1,200 bundles of 20s. thread. This consists of "throstle" and "mule" yarn. The former finds its way principally to Ahmedabad and Cambay, whilst the latter is worked up in Surat.

53. The mill will soon have two more mules at work, with 648 spindles each. The average prices realized are annas 13 for "throstle," and annas 12 per lb. for "mule yarn."

54. To [illegible]nning will also be added ginning cotton. For this

purpose 20 Platt's Macarthy roller gins will soon be at work, to be followed by 40 more.

55. When this is effected a ryot will be able to pick his cotton in the field, take it to this mill, and bring it away again (after cleaning and spinning) made up into the best spun yarn.

56. A review of Surat would be incomplete without special reference to the Sub-Collectorate of Broach,

57. In twelve Talooks of the zillah cotton is cultivated, but in the four comprising the Sub-Collectorate considerably more than half the crop is raised.

58. Broach, too, is far beyond all the rest of Guzerat in the number and efficiency of its facilities for preparing and packing cotton.

59. For detailed particulars of the ginning and pressing establishments I am indebted to Mr. James Greaves, the able and energetic managing director of the Victoria Company at Broach.

60. At this very important cotton centre the Companies established are the Victoria Company, which works 80 of Platt's 40-inch double action Macarthy roller gins with engines of 25-horse power. On an average 62,000 lbs. of seed cotton, or kuppas, are cleaned here per day.

61. The Mofussil Press and Ginning Company work 74 gins of the same description of Platt's, with 2 engines of 15 horses each. This mill is also now under Mr. Greaves' energetic management.

62. The Broach cotton mills both clean cotton and spin yarn. They have 56 gins of the same description as above. Of these, however, only 26 were working when I was at Broach with a 12 horse power steam engine. The mill was in full work. There were 17,540 spindles going, making 20*s*. yarn, the average turn out being 2,500 lbs. per day.

63. Messrs. Byramjee Dhunjeebdoy and Sons have 24 Platt's Macarthy gins going with a 25-horse power engine. This Company will shortly have 30 more machines at work.

64. The whole of the above factories were, when I was in Guzerat, working as hard as possible, and I saw the cotton literally pouring into Broach far faster than it could be ginned.

65. The kuppas arriving was last year's crop, and nearly all that I saw was of a superior quality. The picking of this season's cotton had then barely commenced.

66. The projected Companies in Broach are numerous, and most of them are so far advanced that they should soon be in full work.

67. Foremost amongst these appeared to be the Anglo-Indian Company's Factory under the management of Mr. David Ellis. All the appointments of this establishment seemed most complete and superior. It will work 70 Platt's Macarthy (large) gins with 2 engines of 25-horse power each.

68. The next factory is Mr. Premchund Roychund's, which when I was there expected to be soon set going with 80 gins of the same description driven by a 30-horse power steam engine.

69. Messrs. Pestonjee Randerwalla and Co. had commenced building a factory for 40 gins to be worked by steam.

70. Of presses, the Victoria Company has got two with hydraulic power for half pressing bales of 4¼ cwt. each, and 2 Guzerat wooden screw presses that pack bales of about the same weight.

71. The Mofussil Company have got two of Mason's patent steam presses for full pressing bales of 3½ cwt. These were lying idle. They also have at work one of Major Hassard's presses packing bales of about 4¼ cwt., and a Guzerat wooden screw press.

72. The Broach cotton mills and Messrs. Byramjee Dhunjeebhoy and Sons have each two American presses for half pressing bales of about 4¼ cwt.

73. The Anglo-Indian Company has an hydraulic press, and Mr. Premchund Roychund's mill will have two Guzerat wooden screw presses.

74. It struck me at Broach that a considerable part of the success there in ginning operation (in bringing about which the cotton trade owes much to Mr. Greaves) is due to the practice followed of purchasing the cotton as fast as it is cleaned. Thus a ryot brings in his "kuppas," it is duly ginned, and he takes away the seed only after selling his cleaned cotton on the spot at the market rate of the day.

75. I found cotton coming into Broach from places 30 miles off. It may give some idea of what a favourite cotton mart it is when I add that, in addition to the cotton of its own zillah, almost the whole of the staple of the Baroda State finds its way here.

76. Before concluding these observations regarding Broach, I would mention that I am under much obligation to Mr. Greaves for the great trouble and interest he took in showing me over the cotton establishments of that place.

Khandeish.

77. This is the only cotton zillah in the Northern Division out of Guzerat; and if the district progresses as it is now doing it

promises fair to become one of the most (if not *the* most) important cotton district of the Presidency.

78. The total increase of area cultivated is acres 1,98,426 goontas 28¼ or upwards of 83 *per cent. in excess* of the land taken up in 1865-66.

79. This is made up as follows:—

	Acres.	Goontas.
Increase of land under exotic cultivation	2,16,730	3¼
Deduct—		
Decrease in indigenous cultivation ...	18,303	15
Actual increase, acres	198,426	28¼

80. The increase in crop is candies 30,553, lbs. 587, or upwards of 363 per cent. over last year.

81. It is a gratifying fact that the Collector's return gives only *eight* pounds of the old Khandeish indigenous cotton for the year's crop. With this insignificant exception, the entire yield is exotic, and from the improved Oomrawuttee seed that has been introduced into Khandeish by Mr. Ashburner.

82. Some idea of the way in which the cultivation has been taken up may be formed from the following figures:—

	Candies.	lbs.
In 1865-66 the produce of acclimatized Oomrawuttee was	8,326	484
In 1866-67 it is	38,947	624
which is an increase for the currrent season of.	30,621	140

83. The Collector's return shows that in this district acres 1,407,088, goontas 23, are capable of producing cotton *yearly*. A comparison between this and the area cultivated shows what an immense room there is *still* for extending the growth of cotton in Khandeish, as follows:—

	Acres.	Goontas.
Average quantity of the land capable of producing cotton yearly	1,407,088	23
Area cultivated in 1866-67.....	436,336	38¼
Remains Acres.....	970,751	24¾

84. It will thus be seen that, notwithstanding the immense strides the cultivation has taken, cotton planting is *not yet one-third* of what it can *reasonably be increased to*.

85. Another interesting item in Mr. Ashburner's return is the large increase that has taken place in the *local* consumption of the cotton. The figures are as follows :—

	Candies.	lbs.
Local consumption in 1865-66.....	1,019	476
Local consumption for 1866-67	7,547	624
Increase for 1866-67	6,528	148

86. The above is for "exotic," including "Oomrawuttee" and other cotton. In Khandeish *indigenous* we have a different result :—

	Candies.	lbs.
Local consumption for 1865-66.....	670	345
Local consumption for 1866-67 (It should here be remarked that 8 lbs. is the *entire* crop that is entered in the return as indigenous)	0	8
Increase for 1866-67	670	337

87. Deduct this decrease of consumption of indigenous from the increased consumption of exotic, and the result is—

	Candies.	lbs.
Local consumption—Increase in *exotic* cotton	6,528	158
Deduct—		
Decrease in *indigenous*.....	670	337
Actual increase for the year.....	5,857	595

88. The next matter in the Collector's interesting return that invites attention is the large increase in the quantity of cotton to be *exported* this year from Khandeish, which is no less than candies 24,092, lbs. 716, of the improved exotic (Oumrawuttee) variety, the total quantity for exportation being 31,400 candies.

89. Mr. Ashburner has added to his return details of exotic cotton cultivation. This is so important and interesting that I

have attached an abstract of it to this report in the paper marked D.

90. By that paper it will be perceived that no less than seven kinds of cotton are cultivated, but of these only five can be, strictly speaking, called exotic.

91. It is highly unadvisable to acclimatize a large number of cottons in one district. The reasons are obvious, and it will be as well to limit the descriptions to those that are found most successful, as soon as experiments have finally determined which are the best cottons for Khandeish.

Presidency Total Crop.

92. In this report, and another to the Revenue Commissioner S. D., I have fully reported on the cotton crop of the two divisions, and will now add a few remarks on the comparative results of the whole Presidency.

93. To assist my description I have added the enclosure C. From this it will be perceived that for the current season we have an increase of over 54 per cent. in the extent of land cultivated with exotic cotton, whilst the increase in indigeneous is less than the third of an acre per cent. This shows what an immense advance has been made throughout the Presidency in cultivating improved descriptions of staple.

94. The yield of crop gives the following comparative results. With exotic cotton we have an increase of candies 36,345, lbs 545, or upwards of 125 per cent.; and with indigenous candies 2,92⁸, lbs. 638¼, or nearly 3½ per cent.

95. Before concluding, it would, perhaps, be as well here to note my impressions on comparing Guzerat with Southern Maratha country as cotton-producing districts.

96. The former appeared to me, notwithstanding its richness of soil, inferior to the latter, so far as natural advantages are concerned.

97. The cultivation in the Southern Maratha country also appears to me better than that carried out in Guzerat. The cotton plants are allowed more room, and the fields are kept much cleaner.

98. On the other hand, Guzerat is *far* in advance of the Southern Maratha country both in cleaning and packing cotton. This has been principally brought about by the Northern Division having the immense advantage of railway in direct communication with Bombay, and I fear that the Southern Division will never take the place it ought to hold until by the assistance of a railway

from the coast it is brought into quicker and more satisfactory communication with the cotton merchants of Bombay.

99. I trust this report, and the deductions I have drawn from the Collector's returns, will satisfactorily show what a large and important improvement has been effected in the Bombay cotton trade during the current season.

100. There can be no doubt but that India is making rapid strides in the improvement of its cotton, and this return shows that the movement will bear the full force of commercial depression. In the year under review more has happened to discourage improvement than has been the case in any one season since the commencement of the late American war drew special attention to India as a cotton-producing country.

101. It cannot be too strongly borne in mind by all who take an interest in this important branch of trade that many years and a vast wealth of money were expended before the Southern States of America became (as they were anterior to the war) the principal cotton-producing country of the world, and there is no doubt but that well-directed means and energy will prove as successful (in the *long run*) in this as they have done in that country.

102. When I was in Bombay a short time ago the Chamber of Commerce expressed a wish that these annual reports might be made known to them as soon as practicable. For this reason I would respectfully beg that you will hand on this letter and its accompaniment for the early orders of Government.

103. In future these detailed annual returns will be the only ones submitted in the manner hitherto in force. All the earlier reports will be published direct in the *Government Gazette*, in accordance with the orders contained in Government resolution No. 217, dated 17th January last.

A

Return of Cotton Cultivation and the Estimated Out-turn of the Crop for the Season 1866-67, *as compared with that of* 1865-66, *in the Northern Division of the Bombay Presidency.*

Name of Zillah.	Cotton Crop for the Season.												Remarks.
	1865-66.						1866-67.						
	Extent in cultivation in Acres.			Actual produce in Candies of 784 lbs. of cleaned Cotton.			Extent in cultivation in Acres.			Estimated Out-turn in Candies of 784 lbs. of clean Cotton.			
	Of Exotic Cotton.	Of Native Cotton.	Total.	Of Exotic Cotton.	Of Native Cotton.	Total.	Of Exotic Cotton.	Of Native Cotton.	Total.	Of Exotic Cotton.	Of Native Cotton.	Total.	
	Acres. Goontas.	Acres. Goontas.	Acres. Goontas.	Candies. lbs.	Candies. lbs.	Candies. lbs.	Acres. Goontas.	Acres. Goontas.	Acres. Goontas.	Candies. lbs.	Candies. lbs.	Candies. lbs.	
Ahmedabad	5 0	2,57,641 9	2,57,646 9	0 185	16,998 522	16,998 707	7 34	2,20,027 32	2,20,045 26	1 348	10,905 171	10,906 519	
Kaira	.....	29,358 10	29,358 10	.....	1,616 306	1,616 306	.....	18,224 25	18,224 25	.....	1,681 139	1,681 139	
Surat	4 12	2,32,866 17	2,32,870 29	0 97	23,858 317	23,858 414	3 36	2,56,143 35	2,56,157 31	0 98	24,845 653	24,845 751	
Khandeish	2,19,606 2	18,304 8	2,37,910 10	8,326 484	67 345	8,394 45	4,36,326 5½	 33	4,36,326 38½	38,947 624	0 8	38,947 632	The Khandeish exotic is in reality principally an Indian cotton, viz. Khandeish acclimatized Oomrawutee.
Grand Total	2,19,615 14	5,38,170 4	7,57,785 18	8,326 766	42,540 706	50,867 688	4,36,367 35½	4,94,397 5	9,30,765 ½	38,949 286	37,432 187	76,381 473	

Cotton Commissioner's Office, Camp Kulghutghee, 28th February 1867.

W. WALTON,
Acting Cotton Commissioner.

B

Abstract of Cotton Returns of the Northern Division of the Bombay Presidency showing the estimated difference between extent of cultivation and out-turn of Crop of the year 1865-66 *as compared with that of* 1866-67.

Seasons.	Extent of cultivation in Acres.			Out-turn in Candies of 784 lbs. of cleaned Cotton.			Remarks.
	Of Exotic Cotton.	Of Native Cotton.	Total.	Of Exotic Cotton.	Of Native Cotton.	Total.	
	Acres. Goontas	Acres. Goontas	Acres. Goontas	Candies. lbs.	Candies. lbs.	Candies. lbs.	
The year 1865-66	2,19,615 14	5,38,170 4	7,57,785 18	8,326 766	42,540 706	50,867 688	
The year 1866-67	4,36,367 35½	4,94,397 5	9,30,765 ½	38,949 286	37,432 187	76,381 473	
Less than 1865-66 ...	.....	43,772 39	.....	.....	5,108 519	.....	
More than 1865-66 ...	2,16,752 21½	.....	1,72,979 22½	30,622 304	.....	25,513 569	

W. WALTON,

Acting Cotton Commissioner.

Cotton Commissioner's Office, Camp Kulghuighee, 28*th February* 1867.

C

Abstract of the Cotton Returns of the Bombay Presidency showing the estimated difference between extent of cultivation and out-turn of Crop of the year 1865-66, *as compared with that of* 1866-67.

Seasons.	Extent in cultivation in Acres.			Out-turn in Candies of 784 lbs. of cleaned Cotton.			Remarks.
	Of Exotic Cotton.	Of Native Cotton.	Total.	Of Exotic Cotton.	Of Native Cotton.	Total.	
	Acres. Goontas	Acres. Goontas	Acres Goontas	Candies lbs.	Candies lbs.	Candies lbs.	
The year 1865-66	4,88,588 15	12,22,210 2	17,10,798 17	29,043 522	80,134 507	1,09,178 245	
The year 1866-67	7,51,814 30¼	12,26,367 32¾	19,78,182 23	65,389 283	83,059 361¼	1,48,448 644¼	
Less than 1865-66.....	.....	.....	None.	.....	.....	.....	
More than 1865-66.....	2,63,226 15¼	4,157 30¾	2,67,384 6	36,345 545	2,924 638¼	39,270 399¼	

W. WALTON,

Acting Cotton Commissioner.

Cotton Commissioner's Office, Camp Kulghutghee, 28*th February* 1867.

D

Abstract of details of Exotic Cotton Cultivation in the year 1866-67 *in the Khandeish Zillah of the Bombay Presidency.*

Extent of land cultivated in Acres and Goontas.												Yield of clean Cotton in Candies of 784 lbs. each.												Remarks.
Berar Seed.		Hingunghaut Seed.		Dharwar.		Egyptian.		Peruvian.		Sea Island.		New Orleans acclimatized in Hingunghaut.		Berar.		Hingunghaut.		Dharwar.		Egyptian.		Peruvian.		Sea Island.		New Orleans Hingunghaut.		
A.	G.	A.	G.	A.	G.	A.	G.	A.	G.	A.	G.	A.	G.	C.	lbs.	C.	lbs.	C.	lbs.	C.	lbs.	C.	lbs.	C.	lbs.	C.	lbs.	
4,35,301	15½	871	20	34	17	31	37½	20	1½	18	37½	60	24½	38,866	153	77	637	0	752	0	418	0	116	0	89½	2	26	

W. WALTON,

Acting Cotton Commissioner.

Cotton Commissioner's Office, Camp Kulghutghee, 28th February 1867.

RESOLUTION.—The Right Honorable the Governor in Council has read with interest Mr. Walton's complete report.

2. The Revenue Commissioner N. D.'s suggestion for a cotton exhibition at Broach is approved, and further particulars will be awaited.

3. Copies of these papers to be furnished to the Secretary of State, the Government of India, the Manchester Cotton Supply Association, and the Chamber of Commerce, Bombay. A copy should also be placed on the Editors' Table.

No. 50 OF 1867.

Bombay Chamber of Commerce,
8th April 1867.

F. S. CHAPMAN, Esq.,
Chief Secretary to Government,
Bombay.

SIR,—I am directed by the Committee of management of the Chamber of Commerce to acknowledge the receipt of your letter of the 27th ultimo forwarding extract from the proceedings of Government in the Revenue Department No. 1234 comprising a report by Mr. Walton in charge of the office of Cotton Commissioner on the cotton crop of the Collectorates on the Northern Division of the Presidency for 1866-67.

The information contained in this report seems very complete and carefully compiled, and the Committee desire respectfully to express to Government the sense they entertain of the importance of the cotton statistics of the Presidency being prepared in such a complete manner and published for general information. If the reports for the Presidency could be issued in future a little earlier, it would be a great boon to the Mercantile community.

I have the honour to be, &c.,
(Signed) JAMES TAYLOR,
Secretary.

No. 2681 of 1867.

REVENUE DEPARTMENT.

Bombay Castle, 19th July 1867.

To the Secretary Chamber of Commerce,

Bombay.

SIR,—I am directed to forward, for the information of the Chamber of Commerce, copy of a Memorandum from the acting Commissioner in Sind and of the return, therewith submitted, of cotton cultivation in that province for the year 1866-67 compared with that for 1865-66.

No. 1533, dated 1st July 1867.

I have the honour to be, &c.,

(Signed) H. E. JACOMB,

For Acting Chief Secretary to Government.

No. 2679.

EXTRACT from the proceedings of the Government of Bombay, in the Revenue Department, dated 19th July 1867.

Read the following Memorandum by W. H. Havelock. Esq., acting Commissioner in Sind, No. 1533, dated 1st July 1867, with accompaniment.

Return of cotton cultivation in the province of Sind during the year 1866-67, compared with that for the previous year 1865-66, submitted for the information of Government.

2. The decrease is attributable to a fall in the price of cotton and the unsettled state of commercial affairs.

3. The acting Commissioner begs to be informed whether the submission of this return is still necessary, as the information is contained in the report of the cotton inspector, and in the monthly statement submitted to Government.

TABLE.

Statement of Cotton cultivation in the Province of Sind during the year 1866-67, *contrasted with the extent in the previous year* 1865-66.

Districts.	1865-66. Extent of Land cultivated.				1866-67. Extent of Land cultivated.				Prospect of Season's Crop.		Remarks.
	Native Cotton.	Foreign Cotton.	Total.	Number of Saw Gins in use.	Native Cotton.	Foreign Cotton.	Total.	Number of Saw Gins in use.	Raw Cotton.	Cleaned Cotton.	
Kurrachee Collectorate.	*Acres g. a.*	*Acres g. a.*	*Acres g. a.*		*Acres g. a.*	*Acres g. a.*	*Acres g. a*		*Mds. srs. lbs.*	*Mnds. srs. lbs*	
Kurrachee	2 20 0	33 23 0	36 3 0	.....	2 0 0	80 0 0	82 0 0	.....	104 0 0	26 0 0	
Dadoo	2,524 30 0	.....	2,524 30 0	.....	528 0 0	.....	528 0 0	.....	1,056 0 0	264 0 0	
Sehwan	711 6 0	.....	711 6 0	.....	530 35 0	0 20 0	551 15 0	.....	2,594 35 0	647 28 0	
Mahjunda	134 2 0	.....	134 2 0	.....	119 5 0	.....	119 5 0	.....	317 29 0	79 17 0	
Kotree	89 6 0	0 8 0	89 14 0	.....	108 0 0	.....	108 0 0	.....	84 0 0	21 0 0	
Tatta	126 11 0	.....	126 11 0	.....	77 31 0	.....	77 31 0	.....	118 0 0	55 36 0	
Sackra	5 20 0	.....	5 20 0	.....	2 12 0	.....	2 12 0	.....	.....	.....	
Gorabaree	4 23 0	.....	4 23 0	.....	.....	.....	.....	.....	.....	.....	
Meerpoor Buttora	105 28 0	.....	105 28 0	.....	64 23 0	.....	64 23 0	.....	322 10 0	107 7 0	Decrease in Native Cotton 2,277 22 0
Beyla	25 24 0	.....	25 24 0	.....	43 28 0	.....	43 28 0	.....	58 25 0	21 20 0	Increase in Foreign Cotton 46 29 0
Jatree	16 27 0	.....	16 27 0	.....	9 20 0	.....	9 20 0	.....	22 0 0	6 0 0	
Shahbunder	17 21 0	.....	17 21 0	.....	0 2 0	.....	0 2 0	.....	.....	.....	Net Decrease 2,230 33 0
	3,763 18 0	33 31 0	3,797 9 0	.....	1,485 36 0	80 20 0	1,566 16 0	.....	4,677 19 0	1,228 28 0	
Hydrabad Collectorate.											
Hydrabad	2,152 24 0	.....	2,152 24 0	1,228	4,145 15 0	.....	4,145 15 0	18	33,153 32 0	8,298 18 0	
Goonee	1,103 0 0	.....	1,103 0 0	248	841 25 0	.....	841 25 0	232	3,222 0 0	900 0 0	
Buddeen	305 0 0	.....	305 0 0	102	237 10 0	.....	237 10 0	89	1,563 0 0	480 0 0	
Baga-ka-Tanda	310 0 0	.....	310 0 0	120	382 8 0	.....	382 8 0	115	1,900 0 0	460 0 0	
Deera Mohbut	2,031 0 0	.....	2,031 0 0	300	2,300 0 0	.....	2,300 0 0	400	11,400 0 0	3,100 0 0	Increase in Native Cotton 7,220 34 0
Halla	2,841 2 0	.....	2,841 2 0	.....	4,833 30 0	.....	4,833 30 0	.....	43,484 0 0	14,234 0 0	
Shahdadpoor	3,444 23 0	.....	3,444 23 0	.....	4,400 15 0	.....	4,400 15 0	.....	12,371 0 0	3,497 10 0	
Allyar-ka-Tanda	2,961 12 0	.....	2,961 12 0	2	5,585 26 0	.....	5,585 26 0	.....	27,875 0 0	9,835 0 0	
Meerpoor	2,148 12 0	.....	2,148 12 0	.....	2 794 0 0	.....	2,794 0 0	.....	22 392 0 0	5,598 0 0	
Nowshera	3,076 37 0	0 1 0	3,076 38 0	305	2,496 21 0	.....	2,496 21 0	376	1,045 30 0	2,597 17 0	
Kundiara	1,249 29 0	.....	1,249 29 0	229	1,199 33 0	.....	1,199 33 0	250	8,954 8 0	2,263 22 0	
Morah	1,160 11 0	.....	1,160 11 0	108	848 19 0	.....	848 19 0	80	2,545 20 0	720 23 0	
Sakkrund	589 14 0	.....	589 14 0	327	528 36 0	.....	528 36 0	252	1,835 0 0	459 0 0	
	23,373 4 0	0 1 0	23,373 5 0	2,969	30,593 38 0	.....	30,593 38 0	1,821	1,71,761 10 0	52,448 12 0	
Shikarpoor Collectorate											
Larkhana	8,042 0 0	.....	8,042 0 0	.....	5,212 0 0	155 0 0	5,367 0 0	.....	16,101 0 0	4,025 10 0	Decrease in Native Cotton 8,637 35 0
Rohfee	10,745 22 0	6 31 0	10,752 13 0	.....	6,503 35 0	6 31 0	6,510 26 0	.....	19,531 12 0	4,382 33 0	Increase in Foreign Cotton 155 0 0
Mehur	5,813 24 0	.....	5,813 24 0	.....	4,257 33 0	.....	4,257 33 0	.....	12,773 4 0	3,193 11 0	
Shikarpoor and Sukkur	3,970 31 0	.....	3,970 31 0	.....	3,960 14 0	.....	3,960 14 0	.....	11,881 0 0	2,970 10 0	Net Decrease 8,482 35 0
	28,571 37 0	6 31 0	28,578 28 0	.....	19,934 2 0	161 31 0	20,095 33 0	.....	60,286 16 0	15,071 24 0	
Frontier District.											
Meerpoor	927 20 0	.....	927 20 0	240	744 30 0	25 0 0	769 30 0	310	Not given.		Decrease in Native Cotton 84 36 0
Kusmore	1,347 11 0	.....	1,347 11 0	45	1,054 17 0	.....	1,054 17 0	45			Increase in Foreign Cotton 25 0 0
Jacobabad	387 15 0	.....	387 15 0	15	778 3 0	.....	778 3 0	15			
	2,662 6 0	.....	2,662 6 0	300	2,577 10 0	25 0 0	2,602 10 0	370			Net Decrease 59 36 0
Thur and Parkur.											
Kippra	250 0 0	.....	250 0 0	.....	340 0 0	.....	340 0 0	55	150 0 0	458 0 0	Increase in Native Cotton 828 1 0
Sanghur	403 13 0	5 6 0	408 19 0	.....	175 0 0	.....	175 0 0	60	.....	600 0 0	Decrease in Foreign Cotton 0 6 6
Oomerkote	152 17 0	.....	152 17 0	.....	1,105 26 0	5 0 0	1,110 26 0	40	1,200 0 0	2,400 0 0	
Mittee	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Net Increase 827 35 0
Deepla	.....	.....	.....	.....	2 34 0	.....	2 34 0	3	1 0 0	3 0 0	
Nuggur	.....	.....	.....	.....	2 31 0	.....	2 31 0	.....	.....	.....	
Chachra	.....	.....	.....	.....	7 20 0	.....	7 20 0	2	1 0 0	6 0 0	
	805 30 0	5 6 0	810 36 0	.....	1,633 31 0	5 0 0	1,638 31 0	160	1,352 0 0	3,467 0 0	Decrease in Native Cotton 2,951 18 0
											Increase in Foreign Cotton 226 22 0
Grand Total	59,176 15 0	45 29 0	59,222 4 0	3,269	56,224 37 0	272 11 0	56,497 8 0	2,351	2,38,077 5 0	72,215 24 0	Net Decrease 2,724 36 0

W. H. HAVELOCK,
Acting Commissioner in Sind.

RESOLUTION.—To be communicated to the Government of India and the Chamber of Commerce, and to be placed on the Editors' Table.
2. Mr. Havelock to be answered in the affirmative with reference to his 3rd paragraph.

APPENDIX H.

WORKING OF THE COTTON TRAFFIC ON THE G. I. P. RAILWAY.

No. 3220 of 1867.

Great Indian Peninsula Railway Company's Offices,

Bombay. 21st May 1867.

To James Taylor, Esq.,

Secretary to the Chamber of Commerce, Bombay.

Sir,—As all the cotton was cleared out of our stations on the North East line on the 4th instant, the few bales that may have been lying there since that date not being kept back for want of railway accommodation, but being held for trade reasons. I beg to forward for the information of the Chamber a memorandum of the weight of the cotton brought to Bombay by the Great Indian Peninsula Railway in the first four months of the year, all that offered in December, about 45,000 maunds having been removed in that month.

	Maunds.
1867—January	2,96,234
February	3,76,092
March	4,64 569
April	4.66,540
Total	1,603,435

Tons.
or 59,386 carried an average distance of 318 miles.

Last year the following showed our work:—

January	2,91,147
February	2,59,654
March	2,85.272
April	3,13,310
	11,49,383

Tons.
or 42,569.

The above shows what we have done in four months, but I have also to note what has travelled by road as some of that may be considered as work properly ours which we have not been able to do.

On the Ghauts there travelled—

Thull Ghaut.	Carts.	Bullocks.
In January	130	„
„ February	150	„
„ March	1,011	3,682
„ April	2,354	11,041
	3,645	14.723

and 60 Camels.—

Bhore Ghaut.	Carts.	Bullocks.
In January	941	„
„ February	1,114	„
„ March	1,835	„
„ April	4,133	„
	8,023	

Taking 7 cwt. as a cart load and 3 cwt. as a bullock load the above amounts to 6.313 tons.

The Railway could not expect to get much of what passed over the Bhore Ghaut coming from places distant from the line, but I believe about half that which passed over the Thull Ghaut would have come by Railway if the owners had not become impatient, while it turns out there was no cause for their impatience, as our work finished on the 3rd of May—we could easily have carried 5,000 tons by the 15th and only 3,500 tons passed in 4 months over that Ghaut.

Next season we shall be better prepared on the North East division than we were this year in the following points.

There will be 275 miles of double line out of 600—this season we had 60 out of 550—we will have 50 per cent more waggons, and probably the proportion of pressed to unpressed cotton will be ⅓rd to ⅔rd instead of as this year ⅔rd to ⅓rd; so that if there be a full crop in those districts of 2,00,000 Candies (70,000 tons) we would be able to run it down to Bombay in three months if the merchants required us to do so.

I have the honour to be, &c.,

(Signed) HARRY RIVERS,
Major General R. E. Agent.

No. 3293 of 1867.

Great Indian Peninsula Railway Company's Offices,

Bombay, 22nd May 1867.

To JAMES TAYLOR, Esq.,

Secretary to the Chamber of Commerce.

SIR,—With reference to the Agent's letter No. 3220 of yesterday's date, I am desired to request that you will alter on the second page the average distance cotton was carried during the four months of 1867 from 318 miles to 350 miles. The former distance was the average during the month of April only, the correct average for the four months being 350 miles.

I have the honor to be, &c.,

(Signed) H. J. P. THOMSON,

Secretary to the Agent.

No. 75 of 1867.

Bombay Chamber of Commerce,

June 3rd 1867.

To MAJOR GENERAL HARRY RIVERS,

Agent to the G. I. P. Railway Company, Bombay.

SIR,—I am directed by the Committee of Management of the Chamber of Commerce to acknowledge the receipt of your letters No. 3220 and 3293 dated respectively 21st and 22nd inst., giving particulars of the weight of the cotton brought to Bombay by the G. I. P. Railway during the first four months of the present year.

The memorandum in question was duly submitted to the Committee of the Chamber at their last meeting, and I am now instructed to convey to you their cordial thanks for placing before them your very interesting statement. From this report they learn with much satisfaction that having removed all the cotton that offered in December 1866 within the month, a quantity amounting to about 45,000 maunds, in 1867 between the 1st of January and 30th of April more than a million and a half maunds, or nearly sixty thousand tons of cotton were carried an average distance of 350 miles. The quantity moved on the railway during the same period in 1866 was forty-two thousand, five hundred and sixty-nine tons, which shows an increase in 1867 of more than sixteen thousand tons, a result which must be considered very satisfactory.

The particulars which your report affords regarding the traffic over the Thull and Bhore Ghauts possess much interest; they prove very clearly that the quantity of cotton brought to Bombay by carts and bullocks is very much less than was generally supposed, 6,313 tons in four months is an inconsiderably quantity as compared to the quantity carried by the Railway, and the Committee are very glad to learn that by the 15th of May you could have easily carried 5,000 tons additional while in four months' time not more than 3,500 tons passed over the Thull Ghaut. The Committee are much pleased to hear of the advanced state of matters on the North Eastern Division of the Railway, and the very complete preparations made for the cotton and other produce traffic that may offer during next year. From your letter it appears you will next year have 275 miles of double line out of 600, whereas this season you have only 60 miles of double line out of 550; you will have 50 per cent more waggons, and probably the proportion of pressed cotton will be ½rd. to ⅓rd. instead of as this year ⅓rd. to ¾rd. so that if there be a full crop in districts of Central India and the Berars of 200,000 candies (70,000 tons) you will be able to run it down to Bombay in three months if required. As it has been the unpleasant duty of the Chamber to complain to Government in the interests of the public regarding the very unsatisfactory character of the traffice arrangements on the Railway in 1863-64 and part of 65, it now affords the Committee true pleasure thankfully to recognise the very great improvement that has taken place within the last two years, and they desire to congratulate yourself specially on the steady advance that has been made during the present year, and on the very satisfactory prospects of increased traffic together with increased efficiency that appear to offer for the future.

As the Committee consider the details regarding the cotton traffic on the railway contained in your letter under acknowledgment to be of public importance, they beg to suggest your placing your letter together with this reply at the disposal of the press.

I have the honour to be, &c.,

(Signed) JAMES TAYLOR,
Secretary.

APPENDIX I.

WET DOCKS IN MOODY BAY.

No. 5451 of 1866.

Municipal Commissioner's Office,

Bombay, 7th December 1866.

To the Secretary to the Bombay Chamber of Commerce,

Sir,—I beg to forward for the consideration of the Committee of the Chamber of Commerce copies of certain papers detailing a scheme for Public Docks in Moody Bay coupled with the establishment of a Harbour and Dock trust.

These papers have already appeared in the daily papers but with few serious errors in printing.

Appended to the papers is a tracing of the proposed Docks.

Mr. Aitken has been requested to prepare a paper dealing in detail with the Engineering part of the question. I shall lose no time in placing it before the Chamber.

In the meantime I venture to solicit the active co-operation of the Chamber of Commerce in furthering the scheme.

I have the honor to be, &c.

(Signed) Arthur Crawford.

Municipal Commissioner for the City of Bombay.

No. 5219 of 1866.

Municipal Commissioner's Office,

Bombay, 1866.

To the Secretary to Government P. W. Department.

Sir,—I have the honor to forward, for the consideration of H. E. the Governor in Council, two letters from Mr. Russel Aitkin, Municipal Executive Engineer—the first (dated 6th September) proposing the formation of a Harbour and Dock Trust and the construction of docks in Moody Bay; the second (dated 17th instant) forwarding a plan of the proposed docks.

Mr. Aitkin was not aware that the project of constructing docks in Moody Bay had long since been placed before Government by its own Engineers, and that it was (as I believe) deliberately rejected by a former Government in favour of the plan about to be carried out. It is probable, therefore, that in its general features his plan may resemble those already before Government.

It is fortunate that Government have not as yet committed itself by a heavy outlay to the sanctioned scheme, so that there is really no reason that I am aware of why this important question should not now be reconsidered.

Since the first Moody Bay dock scheme was abandoned, the condition and prospects of Bombay have undergone a vast change, and the necessity for dock accommodation has for the last few years been acknowledged by all.

Every reclamation company has proposed the construction of docks of some kind or other, and there have also been and still are independent dock schemes. All these have been more or less discussed in the public prints. Most of them have been abandoned, and so far as the present trade of the port is concerned, there remains but one scheme likely at all to meet its requirements—that is, Mr. Ormiston's proposed wet docks on the Elphinstone Land Company's Reclamation. This is, I believe, generally admitted to be the most feasible dock scheme before the public, though far from meeting the fullest requirements of the port; yet greater facilities for docks of a much larger area exist in Moody Bay, which Government propose to reclaim at a cost exceeding what would be required for the construction of first class docks sufficient to accommodate double and treble the present trade of the port.

Looking to the probability of any public company being able to carry out a scheme of docks, I think we must concur in the views lately expressed by a writer in one of our daily papers, and that it must be admitted—

1st. That for many years to come no public company will be able to raise sufficient capital in Bombay for so expensive an undertaking.

2nd. That under no circumstances would a dock scheme command public support unless it carried with it a Government concession or a Government guarantee.

3rd. It cannot, moreover, be denied that, however much docks are wanted, it is against the permanent interests of the Commerce of Bombay that docks should be in the hand of a private company.

The above three propositions being established, the soundness of Mr. Aitken's proposal must be at once conceded. A properly constituted Harbour and Dock Trust representing all the great public interests, not called upon to satisfy shareholders by payment of dividends—dependent on their solvency—but bound to expend surplus revenue on the improvements of the public estate, would assuredly command the confidence of the public, and be able to raise whatever funds it might require. It would surely have a good claim to the concession of Moody Bay and even to a Government guarantee.

I do not see any immediate prospect of the Elphinstone Company surrendering their wharfage rights, neither do I think there is any immediate necessity for considering that company in the scheme.

I am confident the Elphinstone Company will be unable at present to raise capital for the completion of Mr. Ormiston's proposed docks, and in the meantime Bombay might be provided with spacious public docks in Moody Bay.

It would be premature to enter into the question of the constitution of the Harbour and Dock Trust. The Harbour Board would be a fair nucleus, but would obviously require strengthening.

I am under the impression that the State looks to the Moody Bay property to repay some portion of the cost of the Harbour Defences, but this might, I think, be easily arranged—by Government reserving to itself a certain percentage of the dock dues.

I earnestly hope that this proposal may have the speedy and favourable consideration of Government. I am convinced that in it lies a solution—perhaps the only solution of the great dock question with which the future of this city is so closely connected.

(Signed) ARTHUR CRAWFORD,
Municipal Commissioner.

No. 2892 of 1866.

Municipality—City of Bombay,
Executive Engineer's Office,
6th September 1866.

To the Municipal Commissioner for the City of Bombay.

SIR,—I take the liberty of addressing you on the subject of the Harbour and Bunder accommodation of Bombay, which although a

matter which does not come under my departmental charge, I cannot forbear bringing forward, as the interest of the town and the future success of the Municipality are almost entirely dependent upon the dock and wharfage accommodation of the port.

I hope the remarks I am about to make will not be taken as mere theoretical ideas, but simply as suggestions based on the application of well known principles adopted with success in England under somewhat similar circumstances.

The first great want always produced by the introduction of railways to a port is ample wharfage accommodation for shipping, so that the railway waggons in which goods are brought from or taken to the interior of the country may be brought alongside the vessels, and the goods be rapidly transferred from one to the other, thus saving the enormous expense and delay which attends the present cumbrous system of carts and bunder boats.

It may be urged that this wharfage accommodation is not required in Bombay, because it would not be used by merchants, who invariably take goods to their warehouses before shipping them. It is further stated that this is a state of things which cannot be altered, it having been the native manner of conducting business from time immemorial. Those who argue in this way appear to me to overlook the fact that the present imperfect method of carrying on trade results from causes which in future ought to have no existence. It is evident that the sole aim of every merchant, whether European or native, must be to conduct his trade in as economical a manner as possible. It is, therefore, absurd to suppose that if increased facilities are given effecting an enormous saving, such as would be effected by the proposed change, the merchants will not avail themselves of them. My own opinion is that they would at once adapt themselves to the altered circumstances.

There are two methods by which wharfage accommodation may be provided, viz., either by the construction of jetties projecting into the deep water of the harbour or by wet docks constructed on the foreshore.

The objections to the projections of jetties from any points near the centres of trade, the Fort and the Native Town, are that ships could not lie alongside the jetties during a great part of the monsoon, and that the jetties, if carried far enough out to be useful, would interfere with the anchorage and also with ships using the harbour. The only alternative therefore is the construction of wet docks on the foreshore.

The Elphinstone Land and Press Company are proposing to have wet docks, and the Bombay Reclamation Company are also taking

steps in the same direction. The Government alone are at vast expense providing means for working only bunder boat traffic—a traffic which must in the very nature of things shortly become much curtailed; besides that its requirements will be amply provided for by the two basins in the Elphinstone Reclamation by the proposed Malet Basin, which will give, I believe, about twice the accommodation for bunder boats now possessed by the harbour.

Within the next few years the trade of Bombay will doubtless be greatly augmented, but its increase during the next thirty years can easily be accommodated by wet docks, which might be constructed on the Elphinstone and Moody Bay reclamations. Those proposed in Back Bay and at other places in the Island of Bombay need not, therefore, be seriously considered at present, as they are so far removed from the warehouses, &c., of the Fort and Native Town, that they could not compete for traffic with docks which are situated nearer. I assume that the first cost per acre of dock space at all the proposed places would be about the same.

It would thus appear that the trade of the city of Bombay for some considerable time must depend on the accommodation provided for it on the Elphinstone and Moody Bay Reclamations. Such being the case it appears to me that the Municipality should have some voice in the management of those reclamations: otherwise there is nothing to prevent the interests of the city being first sacrificed to those of the harbour or *vice versa*, and ultimately the interests and prosperity of both may be seriously and permanently injured.

In most of the large ports of England and Scotland the docks and harbours are either directly under the municipalities, or they are managed by separate "Trusts" or public bodies, several of the members of which are nominated by the municipalities. Thus, although the interests of the harbour and of the city may be and often are distinct, yet by the above mentioned arrangement these difficulties are overcome, and both public bodies work harmoniously together.

Whether the Harbour Board of Bombay is capable of extension and reorganization to such an extent as to undertake the construction of wet docks on the Elphinstone and Moody Bay reclamations is a subject on which I cannot venture an opinion, nor can I indicate what terms could be arranged with the Elphinstone Land Company for a transfer of their bunder rights, for which and for the right of reclamation they have paid so heavily, nor can I venture to say whether Government would be willing to hand over the

frontage of Moody Bay, by far the finest site for dock purposes in Bombay, instead of incurring an enormous expenditure in providing accommodation for a traffic which must to a great extent become subsidiary and dependent on properly constructed docks.

"If a Harbour and Dock Trust, such as is usual at home, be instituted in Bombay, it could, I believe, in its corporate capacity easily raise money in England, such securities being considered one of the safest and most desirable modes of investment, money being obtained by Harbour and Dock Trusts at a slightly lower rate than by the best railway companies.

I would in conclusion point out that the present is the most favourable time for the organization of a Harbour and Dock Trust, as the great depression of the securities of the Elphinstone Company will probably induce that Company to agree to terms which could not in other and more favourable times be hoped for. The Elphinstone shares are now at a heavy discount, which circumstance combined with other depressing effects of the late crisis must prevent the Company for some time at least from being able to raise money on anything like favourable terms for the completion of their proposed docks and bunder boat wharves.

I have the honour to be, &c.,

(Signed) RUSSEL AITKEN,

Executive Engineer to the Municipality.

No. 3546 of 1866.

Municipality—City of Bombay,

Executive Engineer's Office,

17th November 1866.

To the Municipal Commissioner for the City of Bombay.

SIR,—In continuation of my letter, No. 2892, dated 6th September 1866, I have the honour to forward herewith a plan for a dock of 46 acres on the Government Reclamation in Moody Bay,

A glance at the chart of the harbour will show that the two fathom line is closer in shore here than at any other point in the harbour. There is therefore a depth of 12 feet at low water spring tides immediately in front of the entrance lock. Consequently there will be no difficulty in obtaining a depth of water on the sill of the lock of not less than 28 at high-water

of ordinary spring tides. This will give a depth of 23 feet at high-water neap tides, which is quite sufficient for any of the ships in the harbour.

Having been engaged on several works of a similar description in England, I shall be glad (after I have finished my report on the drainage of Bombay) to give my reasons for the design sent herewith. I would only remark that I believe this large dock of 46 acres can be carried out for a less sum than the bunder boat basins which the Government engineers are now about to undertake.

I have the honour to be, &c.
(Signed) RUSSEL AITKIN,
Executive Engineer to the Municipality.

Public Works Department,
Bombay, 8th February 1867.

To the Secretary to the Chamber of Commerce, Bombay.

SIR,—I am desired to invite your attention to two reports by Mr. Russel Aitken, Executive Engineer to the Municipality, which have been forwarded to Government through the Municipal Commissioner, recommending the construction by a Harbour Trust of wet docks in Moody Bay. Copies of these reports, and also of two valuable* letters from Colonel DeLisle, R.E., to whom the reports were referred by Government for his opinion, and an abstract of previous correspondence on the subject prepared in the Secretariat, are enclosed.

* No. 27, dated 25th January, and No. 31, dated 26th January 1867.

2. The important questions discussed in these papers have already, it will be seen, received much attention. They are, in the opinion of His Excellency in Council, mainly commercial, and can hardly be decided on other than commercial grounds, nor without especial reference to the commercial wants of the port.

3. Among the points a settlement of which must precede further useful discussion, the following may be stated:—

1*st*.—Are Mr. Russel Aitken's estimates of the comparative cost of loading and unloading ships in the open harbour and in wet docks sufficiently accurate to afford a fair basis for estimating the probable income which can be derived from wet docks? If not, what corrections are needed?

2*ndly*.—Can this income be relied on without legislation to make the use of the docks compulsory?

3rdly.—If not, can resort be had to such legislation without injustice to those who in a capacious haven like Bombay, do not desire to use wet docks?

4. These questions are so entirely commercial, that in order to assist Government in deciding them speedily and satisfactorily, I am to ask the Chamber of Commerce to favour Government with the names of any gentlemen who in the opinion of the Chamber are competent judges, and likely to consent to investigate the subject in conjunction with Colonel DeLisle, R. E., the Commissioner of Customs, Mr. Russel Aitken, and any other gentleman whose name the Harbour Board may wish to add.

5. It is very desirable that all interests affected should be represented in this inquiry—the shipping and railway, as well as commercial interests—and that the representatives should embrace all branches of maritime commerce, the native as well as the European houses, whether members of the Chamber or not; and I am therefore to ask the Chamber to make their selection sufficiently comprehensive to meet, as far as possible, all these requirements.

6. It is probable that after a preliminary oral discussion, the gentlemen named may be able to delegate the collection of further evidence, should they find it needed, on particular facts, to selected members of their body, meeting to discuss orally the doubtful points before the final report is adopted.

7. Government feel assured that, even should the time and trouble required for this inquiry be greater than Government at present anticipate, the labour will not be grudged by those who justly estimate the great importance of the subject to the commerce of Bombay, and who know how desirable it is that questions of this kind, when once raised, should be speedily and carefully disposed of.

8. If the opinion of those best qualified to judge should be pronounced in favour of having wet docks at once constructed, then will arise the questions of the best site or sites for such docks, and the best means of raising the money to make them, and the best agency for constructing or managing them when made, so as to secure the greatest possible amount of benefit to the commerce of the port; but at present it would be premature to enter on these questions.

I have the honor to be, &c.,

(Signed) W. KENDALL,
Colonel, R. E.,
Acting Secretary to Government.

No. 27 of 1867.

Public Works Department,
Bombay, 25th January 1867.

To COLONEL KENDALL, R.E.,

Secretary to Government, Public Works Department,
Bombay.

SIR,—I have the honor, with reference to memorandum No. $\frac{1266 \text{ C. W.}}{3061 \text{ M.}}$ dated 7th December 1866, to offer the following remarks on the subject of wet docks for the consideration of Government.

2. When Lieutenant Ducat first took charge of Moody Bay, he drew the attention of Government to this question in his letter No. 72, dated 18th December 1865, forwarded under my No. 81, dated 27th December 1865. Government however declined to discusss the matter in their letter No. $\frac{57 \text{ C. W.}}{127 \text{ M.}}$ dated 13th January 1866. I merely refer to this as much blame has been thrown on Public Works officers in the public prints on account of their supposed predilections for boat harbours.

3. The popular theory about floating docks is, that a vessel goes into them, is forthwith relieved of her cargo, refilled in a fortnight, taken out of dock, and despatched on her return voyage in less than a month from the time of her arrival.

4. But in practice matters seem not to work quite so smoothly. The late Mr. Brooke, who had had great experience as a landing and shipipng clerk at Liverpool and London, informed me that vessels in London docks were frequently unloaded into lighters which conveyed the goods to their destination, often in other docks; and a little consideration would show that it must necessarily be so. Warehouses are not used for the promiscuous storage of goods, but each building, or each floor of a building, is assigned to a particular class of goods. Now in a vessel carrying a mixed cargo, it would be a hundred chances to one that the cargo would be such as could be accommodated in any one warehouse that she could be placed alongside of. I might go further, and say that in all probability some portions of the cargo would not be received in any warehouse belonging to the dock she lay in.

5. It would of course be a very expensive proceeding to take a large sea-going vessel round to a number of warehouses; so that, after all, lighters cannot entirely be dispensed with.

6. At Liverpool some of the docks are provided with sheds, into which the vessel discharges her cargo. This is then sorted in the shed, and distributed as may be required. This would probably be the best system to adopt here. But then another consideration arises—the vessel has to be reloaded.

7. To do this conveniently, the cargo must be collected in a shed, sorted, and put into the hold of the vessel with due regard to weights, according to the experience of her captain. Some vessels sail best with their dead weight low down, others do better when it is placed higher up; and in practice these considerations are of importance.

8. Now in London the loading of a vessel bound, we will say, for Bombay, may be very quickly accomplished, as the shipowner can generally obtain a full load in a reasonable space of time. But I am informed that this is not the case in Bombay: a merchant wanting freight to London for his ship, may only be tendered goods for Liverpool, or *vice versa*. Then a ship cannot be wholly loaded with cotton, and may have difficulty in procuring sufficient quantity of seeds or other dead weight to ballast her properly. So that as a rule, ships are delayed in loading, not on account of the defects of the boat or lighter system, but from the difficulty of obtaining the right description of cargo at the right time.

9. Then there is the question, can a vessel afford to remain two or three months in dock while loading? I apprehend she would not, but would prefer lying out in the anchorage free of rent and other dock dues. It may of course happen that a shipper had sufficient cargo to fill a vessel ready at hand, and in this case there would doubtless be an advantage in loading in dock; but I imagine that this would be rather the exception than the rule.

10. It may be said that the goods could be collected in the wharf sheds, and that the vessel could be brought in at the right time to load. That is no doubt true, but these wharf sheds should command rents higher than those of ordinary warehouses, as they must be limited in number, and in great demand, so that after all the rent of the shed would nearly balance the saving in tonnage fees.

11. The advantage of a wet dock seems to me to be limited chiefly to the time occupied in unloading a cargo on arrival: and even this may be partly neutralised by the necessity of taking in

ballast, should there be no outward cargo at hand to replace a portion of the cargo removed, and so preserve the trim of the vessel.

12. Next as regards the Lighter and Boat Wharf system, which been so greatly reprobated in the public prints. Under existing circumstances this is doubtless just enough, but it may be fair to enquire into the causes of their inefficiency.

13. The new wharves of the Elphinstone Land Company are hardly commenced, and those of the other companies are mostly appropriated to cotton and other free goods. The only wharfage available for dutiable goods is that of the Custom House, and one or two other small wharves inconvenient in themselves, and certainly affording no accommodation for landing a ship's cargo as a whole, to be sorted for delivery. Under this state of things it has grown into a custom for each consignee to send off his own boats to fetch his own portion of cargo; and, as may be well supposed, no better system could have been devised to cause endless delays, expense, and vexations to all parties, whether agents, consignees, or captains of merchant vessels.

14. It is true that a landing and shipping company was formed to afford some remedy to this state of things, but during the mania of speculation it has been mismanaged, and has not, as I believe, either given satisfaction to the public, or an adequate return to the shareholders. But suppose that the Elphinstone and Moody Bay boat wharves were completed as originally proposed, the state of things would be materially altered.

15. Several of the basins on the Elphinstone wharves will have sufficient depth of water to be accessible at low tide, thus removing one great source of delay in using lighters, and the Elphinstone basin, and almost the whole of the Moody Bay wharfage, has sufficient depth of water to allow steamers drawing 8 feet of water to come alongside at all times of tide. There will also be sufficient wharfage accommodation to sort and deliver cargoes on shore.

16. With these advantages a well managed landing and shipping company ought to be able in either case to undertake the business of loading and unloading vessels, and the delivery of consignments to their proper owners, without any further trouble to the agents than giving the company the order and necessary documents; and this in like manner would be done by a dock company. In point of fact, as the wharfage will be all enclosed both on the

Elphinstone and Moody Bay Reclamations they would be in much the same condition as a wet dock, except that large vessels could not come alongside.

17. I believe that the great advantage of docks is, that the companies possessing them relieve the merchants of all trouble concerning the unloading or loading of their vessels and even settle all matters concerning customs, &c. for them.

18. The relative points in favour of each system are that in docks ships can be unloaded in a short time, saving one operation, and diminishing the risk of pilfering and loss to underwriters in cases where no lighters are necessary. Against this must be set tonnage fees, the possible removal of ship from dock if outward cargo is not ready; with attendant expenses for pilotage fees at each movement in harbour.

19. For boat wharves nearly the same advantage as to time, with the disadvantage of increased risk of pilfering, two operations, but probably less expense, as the cost of boating would perhaps be less than the tonnage and pilotage fees.

20. There are however other considerations which will tell in some degree against docks.

21. The water in wet docks, even at home, is generally more or less offensive. This may be mitigated by changing the water partially at spring tides, but we have at present no information to show whether this will be sufficient for the purpose.

22. Sailors cannot, for obvious reasons, be allowed to live on board their vessels while in dock, and must therefore be accommodated in barracks near the docks. This involves expense, and sacrifices a certain extent of land valuable for commercial purposes.

23. Again, the large water space required for the docks involves a corresponding loss of reclaimed land, which is valuable, and would probably yield a better return than the dock. This affects Moody Bay seriously, as the whole area for reclamation is small compared to that of the Elphinstone Land Company.

24. On the whole, the relative advantages of docks and boat wharves seem to me to be very nearly balanced. I have no doubt that if the Elphinstone and Moody Bay wharves were completed and enclosed, as it is intended they shall be, and each set managed by a bonded wharfage company, who should undertake all the duties connected with the landing and shipping of goods and stores, and be responsible for loss and damage, that the commercial public would have little to complain of.

25. Merchants who have been trained at home agree in stating that the great advantage of docks is, that the companies relieve the merchants of all trouble concerning their shipments or consignments. They manage the whole business for them.

26. Now with enclosed dock estates, wharfage companies would do this as well with boat wharves as with docks, and perhaps better, as the operations could be extended to a larger number of vessels at the anchorage, than to the comparatively few that could be loaded or unloaded in a dock of 40 and 50 acres.

27. Bombay has never yet had proper wharfage, and is not, I submit, yet competent, to judge from past experience whether wharfage or wet docks are the best thing they can have.

28. There are no doubt some advantages in Moody Bay for docks, but where land itself is so valuable, it would seem that docks should be constructed where they could be brought into connection with the railways, and yet not interfere with the more valuable uses of land in business localities. In this point of view the docks proposed in Backbay, or others in the space between Bombay and Trombay, might be superior in convenience to those in Moody Bay, and would certainly allow of more actual wharfage.

29. I have entered into the subject at considerable length, as the question seems not to be fully understood in Bombay, either as to the relative advantages of either, or as to the nature of the wharfage hitherto proposed.

30. Mr. Russel Aitken's plan is apparently only a sketch of a general idea, which will require modification to adapt it to the soundings of Moody Bay.

31. I will only remark that, although it professes to take in 400 large ships, about half the number which arrive in Bombay during the whole year, it only affords wharfage accommodation for 34 vessels, which seems a very small proportion.

32. The mode of construction proposed appears to be undesirable.

33. The system of piers extended from a pitched slope has been used in England for the purpose of shipping coal, but is not suitable for general cargoes. The economy is also doubtful, as it would preclude the use of sand, the cheapest material procurable for filling in.

34. It is also generally considered advantageous to separate export and import docks, to avoid confusion in landing and shipping.

35. The steam boat jetty is also objectionable, and situated in foul ground.

36. Next as to the question of Agency.

37. The Municipal Commissioner recommends a Harbour and Dock Trust, with or without a Government guarantee, and a concession of Moody Bay, but doubts the practicability of buying up the interests of the Elphinstone Land Company.

38. Let the Harbour and Dock Trust then be considered as in possession of Moody Bay, the Apollo Pier, Apollo Reclamation partly, the new Musjid Bunder, and the Custom House Bunder, which constitute the present Government wharves, and Tank Bunder, which is a timber depot.

39. To complete the Moody Bay Reclamation would require a million and a half at least, or Rs. 1,50,00,000, of which however we will suppose that one half may represent the average amount raised by the Harbour Trust, and on which interest at 5 per cent. must be paid to the subscribers.

40. This interest amounts to Rs. 3,75,000 per annum, and at least another 5 per cent. would be required to meet the expenses of establishments for collecting the wharfage and other fees, making in all Rs. 7,50,000 per annum.

41. It appears from the shipping returns of 1863-64 and 1864-65, that the average tonnage of sea-going country craft is about 36 tons, and the gross annual tonnage 5,70,000, paying at 2 ans. per ton Rs. 71,250. Similarly the average tonnage of large vessels, including steamers, is 700 tons, and the gross annual tonnage 6,13,600, paying the same rate Rs. 76,700.

42. Now if Moody Bay be formed into a dock for large vessels, it may be assumed that the bulk of the coasting craft will go to the Elphinstone Land Company's wharves, which will be amply sufficient for them, and that consequently the only return to the Harbour Trust from them will be the port dues of Rs. 71,250 annually.

43. Then the large shipping must be made to pay the balance of the requirements of the Harbour Trust, which will be about, or Rs. 6,78,750. This, divided by the tonnage, gives an average of 17½ annas per ton register as the probable amount of dues to be levied, including the two annas for port dues. This is however

somewhat under the mark, as the tonnage includes coasting steamers, which would not require to go into dock, or whose cargo might be transhipped from one steamer to another, and which would only pay the harbour dues of 2 annas portion.

44. We might therefore assume about Rs. 1-4-0, or 20 annas, as the dues to be paid by vessels entering the docks, in addition to the actual cost of discharging and taking in cargo.

45. Now it must be remembered that the construction of wharves or docks is a work extending over some years, and that no immediate advantages to the shipping would be derived from them while the necessity for levying dues to a sufficient extent to pay the interest of the debentures and the establishments, is immediate.

46. Shipowners might therefore naturally object to paying in advance for benefits to be realised in future years, and send their vessels to other ports, or else the interest on the debentures must be paid out of the money raised, or in other words, the cost of the works must be increased *pro tanto*.

47. It is clear that the present dues, amounting to only Rs. 1,40,000, or Rs. 1,50,000, will not suffice, and that the present free wharves at the Apollo Piers and Musjid Bunder would have to be treated as the Elphinstone Land Company and other private wharves, by levying landing shipping fees to put the Harbour Trust in anything like a position to carry on works.

48. At present Government only charge for demurrage on their wharves, and it is doubtful whether the deprivation of this advantage to the trade would be appreciated by the native merchants of Bombay.

49. It would then seem reasonable that the heavy works should, in the first instance, be carried out by an agency able to do so without imposing immediate taxation on the shipping of this port, at least until some corresponding advantage could be offered.

50. It is scarcely necessary to add that the only agency able to do this is that of Government itself.

51. When the works are sufficiently advanced to be remunerative, Government would be in a position to recover a part of its outlay by selling the building sites from time to time, and might then hand over the dock estate to a Harbour Board to be administered by them, the property however to remain vested in Government, to whom the Harbour Trust should account annually, and obtain sanction for further improvements.

52. As to the provision of funds for this purpose, the best way would seem to issue debentures at 5 per cent., under the guarantee of the Government of India, say to the extent of 20 lacs annually.

53. It seems that this plan would be in every respect superior to that of committing the construction of the Moody Bay works to a Municipal or Harbour Trust. Even with a Government guarantee, they would hardly raise money under 6 per cent., while Government can get it for 5 per cent., or less, as in the case of the recent loan for public works.

Secondly—Government have already procured most of the plant and machinery required for carrying out the works, while another body would have to incur the same outlay *de novo*.

Thirdly—The Municipality have, as I have already mentioned in discussing another subject, ample work before them, more immediately concerning Municipal interests. The drainage of Bombay, provision of additional water supply, the reformation of the roads, cleansing of the Town, and the improvement of the swampy flats in the centre of the Island, are really Municipal works, and ought to be completed before the Municipality be permitted to embark in any speculations on the trade or shipping of Bombay.

54. I may remark that some writers in the public prints throw great blame on Government for having conceded a large portion of the foreshore to the Elphinstone Land Company. But these gentlemen forget that this very measure has rendered a large extent of wharfage available to the public years before it could otherwise have been reclaimed, and that the fees levied by that company cannot be very oppressive, when the land is so eagerly sought after, that it is actually taken possession of by native dealers before the surface has been properly levelled.

55. The conclusions I come to are briefly these:—

(*a.*) That the superiority of docks over boat wharves in Bombay has not been sufficiently established.

(*b.*) That if docks be constructed, the tonnage fees leviable on large shipping will be very heavy in the present state of the Bombay shipping trade.

(*c.*) That well managed landing and shipping companies would do as well with boat wharves as with docks.

(*d.*) That there would be no saving in cost as regards docks, while the loss in saleable land would be considerable.

(*e.*) That the construction of the necessary works should rest with Government.

(*f.*) That powers should be obtained from Her Majesty's Secretary of State to raise an annual sum on debentures to meet the cost of the works.

(*g.*) That these loans should not be subject to the financial veto of the Government of India.

(*h.*) That when the works are completed, the administration of the wharfage may be handed over to the Harbour Board, subject to Government control and that the Municipality has quite enough to do if it minds its own business.

I have the honour to be, &c.,

(Signed) A. DELISLE, Lieut.-Colonel, R. E.,
Consulting Engineer for Reclamations.

Public Works Department,
Bombay, 26th January 1867.

To COLONEL KENDALL, R. E.,
Secretary to Government, Public Works Deparment,
Bombay.

SIR,—In continuation of my report No. 27, of the 25th instant, I have the honor to offer a few observations on Mr. Crawford's letter of the 21st January 1867, and Mr. Russel Aitken's second report.

2. Mr. Crawford is altogether in error in supposing that any special prejudice against docks exists in the minds of officers of the Public Works Department.

3. What is really wanted is, an assurance that wet docks are really required for the trade of Bombay, and that, if constructed, they will be used by the larger proportion of the shipping at this port. For unless this can be given, it would be a very bad bargain to construct docks suitable for large vessels, and see them lying empty and unremunerative.

4. The question is not one for eminent Engineers at home, who cannot be as competent to decide such questions as the merchants themselves on the spot; and I believe I am not mistaken in stating, that some of those best qualified to judge, entertain grave doubts whether wet docks would pay as a commercial speculation.

5. Unless Government are prepared to go the length of making dock dues compulsory on vessels frequenting the port, there must

always be some uncertainty as to wet docks being used, except perhaps under the very favourable circumstances illustrated by Mr. Aitken, pages 8 and 9, when a vessel after unloading finds a cargo ready to hand for reloading. As already explained, such cases would probably be found the exception, not the rule.

6. Moody Bay is not quite in the position of the Elphinstone Reclamation as to this: the Elphinstone Company only propose to convert three basins into a wet dock, with jetties for vessels to lay alongside of, and if they find vessels do not frequent them, have but to remove the gates, and thus utilise them as boat basins at an outside loss of about six lakhs, the extra cost of the gates, and locks; but in Moody Bay, under similar circumstances, the loss of the extra land given to water space for the dock, and that too of land of higher value than that of the Elphinstone Land Company would be an additional and heavy item.

7. Mr. Aitken's argument on the subject of the putridity of water in docks, may hold good in London, but may not apply out here, where the temperature of the water is so much higher. That the water in Bombay Harbour is already very foul, is well known to all who have had any practical experience. Its destructive effects on iron have more than once been felt by vessels lying off the Dockyard. This same water would be used for filling the wet dock, and it would probably, when stagnant, become very offensive—at any rate no reasonable proof to the contrary has yet been adduced.

8. Mr. Russel Aitken apprehends that boats will not be forthcoming to fill all the wharves that would be provided on Moody Bay and the Elphinstone Reclamations. It seems to me that this is not the question at all. Boats will doubtless be available in sufficient numbers to load or discharge all cargoes that may arrive or be despatched from this harbour. But what is really wanted is ample and convenient wharfage for depositing, sorting, und delivering cargoes, either to consignees, or for shipment, and this is a want that can be supplied by space, and has nothing to do with the number of lighters or boats arriving at or leaving the wharves.

9. Whether the dock will be less costly than boat wharves, is a question that can only be decided by detailed estimates, and it is unnecessary to discuss that part of the question now.

10. There is however one part of the subject that has not been discussed by the advocates of the wet docks: whatever wharfage is provided by Government is free, that is nothing is charged for

landing, unless it be for the use of the cranes, which is only reasonable, and for undue detention of goods on the wharves after a certain period; this is also reasonable.

11. But a Harbour Trust having to raise sufficient funds to meet the interest of their debentures and other expenses, would have to levy landing and shipping charges on all goods, as in the case of private companies, and the mere fact of the constitution of a Harbour Trust would at once deprive the public of the advantages of free wharves.

12. The whole question can be very quickly decided by a mixed committee of merchants, engineers, the Commissioner of Customs, and any others who may be interested in the matter. In the mean time Lieutenant Ducat might be instructed to prepare a design for a wet dock, in lieu of the boat wharves, so that no time may be lost if a wet dock be finally decided on.

I have the honor to be, &c.

A. DeLisle, Lieut.-Col. R. E.,
Consulting Engineer for Reclamations.

ABSTRACT OF CORRESPONDENCE ON THE SUBJECT OF DOCK ACCOMMODATION FOR BOMBAY.

In the year 1855 a Committee appointed by Government (composed as per margin) was appointed to report on certain plans for wet docks which had been laid before Government, and any others which might be brought before them, with a view to determine the locality which it would be most proper for Government to offer to any Company who might undertake the construction of docks.

General Waddington, R. E.
E. Heycock, Esq.
Commander Daniell, Master Attendant.
R. Strong, Esq.
R. Spooner, Esq., Commissioner of Customs.
J. J. Berkeley, Esq., C. E.
And Major Estridge as Secretary.
Mr. J. Parsons. } Elected by the
J. Ritchie, Superintendent P. & O. Company. } Chamber of Commerce.

2. Three sites were suggested as appropriate for docks.

I.—Boree Bunder, or Mr. Heycock's site.

II.—Moody Bay, proposed by General Waddington.

III.—Space between Apollo Pier and Bummelow Island, by some members of the Committee.

3. A long discussion ensued on these projects, and the final decision of Government was communicated to the president of the committee in Government letter, Public Works Department, No. 1273, dated 23rd May 1856.

Extract para 2. "His Lordship in Council has decided that of the two proposed dock sites regarding the superior eligibility of which some doubt existed that which your plan shows to be available at Moody Bay is preferable, and he directs that it be kept available for the construction of a Custom House, warehouses, and docks, to be constructed on the general plan submitted by you."

* * * * * *

"4. The Right Hon'ble the Governor in Council intends to at once apply for the Hon'ble Court's approval of the dock scheme, and for their permission to undertake the formation of the docks as a Government work, unless some Company should be found willing to do so."

4. In these discussions two matters deserve attention—one the opinion given by Mr. Ritchie, Superintendent P. and O. Company: "I am of opinion that the advantage of bringing ships into a wet dock has been much over-rated; that the discharge and loading of ships in the Harbour of Bombay can be performed with facility and despatch; and I should deprecate any compulsory use of wet docks attended with heavy dock dues." And on which Lord Elphinstone in his minute dated 29th October 1855, remarked:—"Until I read Mr. Ritchie's memorandum, I had never heard that there was an idea of making the use of the proposed wet docks compulsory. It seems to me that such an idea would be simply ridiculous. If the dock dues should equal the expense incurred by the delay and risk of loading and unloading ships in the open harbour, it would obviously be useless to construct docks at all."

And the other point, that Mr. T. C. Cowie conceives that the extreme estimate of savings which would be effected by docks, and consequently the utmost which it would be fair to levy as a tax on ships and cargoes for the use of the docks and their wharves, would be Rs. 1,11,530, on 1,60,000 tons, or 11 annas per ton, which by the present trade returns would give Rs. 4,21,437, instead of 39 lakhs stated by Mr. R. Aitken.

Chief Engineer's letter No. 3150, dated 27th June 1860.
In reply to Mr. Acting Secretary Robertson's letter No. 1272

dated 11th instant, I have the honor to submit explanation by Captain DeLisle of the alterations made in the scheme proposed by the Hon'ble A. Malet, and modified as respects the wet docks by Mr. R. Stephenson, C.E.

2. The improvement of wharfage, &c. in the Harbour of Bombay has for many years attracted the attention of Government, but until a committee was appointed under Mr Secretary Hart's letter No. 94, dated 20th March 1855, no complete investigation of the subject was made.

3. The proceedings and final decision of that Committee are printed in No. XXXIII; New Series of Selections from the Records of the Bombay Government.

4. The Dockyard Engineer, Captain Wemyss, then prepared a design, not quite in accordance with Major General Waddington's views as to the docks, but sufficiently so as to warrant he transmission to England to Mr. Stephenson.

5. The plan submitted to England included however an entirely new feature, the reclamation of the whole bay from Belvidere Point to the Castle.

6. There is no correspondence in the office with respect to this addition, which emanated entirely, I believe, from Mr. Malet.

7. The scheme was returned with certain modifications by Mr. Stephenson under the Secretary of State's letter No. 11, dated 21st April 1859, and was returned to me in order that it might be designed on more minute data by Captain DeLisle, the original being little more than a sketch.

8. In the letter transmitting the documents to me, No. 1679 of 1859, it is admitted that the reclamation and wharfage is a matter of more pressing importance than the docks.

Extract from Captain DeLisle's Memorandum of Alterations made in Captain Wemyss' soriyinal scheme.

DOCKS.

15. The original plan appears to have been submitted to the late Mr. R. Stephenson, C.E., whose opinion was given in a letter dated 20th March 1859, to J. Cosmo Melvill, Esq.

16. Mr. Stephenson stated that he was unable to give any opinion on the merits of the scheme generally, as much depended on local requirements and difficulties respecting which he had no information before him.

17. The plans comprised an import dock 1,630 feet long by 380 feet wide, an export dock 1,500 feet long and 380 feet wide, with an entrance lock at the southern extremity of the former, a curved break-water near Bombay Castle, with an Ordnance wharf, a Railway basin, and boat quay.

18. Mr. Stephenson approved of the general direction of the sea wall, but stated that the single entrance of the southern extremity was objectionable, if it could be avoided, and that the entrance should be wider, say 200 feet.

19. The form of the dock was also objected to on the ground of the great length of sea wall compared with the wharfage accommodation, and the inconvenience of the vessels for the export dock having to pass through the whole length of the narrow import dock.

21. Mr. Stephenson also sketched a form of a dock which he thought suitable to the requirements of Bombay. This consisted of a single wet dock of large dimensions, with jetties springing out from the mainland. The sea wall curved outwards to give room for an entrance basin capable of holding several vessels at a time. The entrances were to have single pairs of gates with grooves for caissoons.

22. He also recommended that a space should be set aside at the northern extremity of the docks for graving docks.

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5. At the same time Mr. Kennelly submitted a proposal for a Deep-water Pier for Bombay. Government were to construct a breakwater across the Middle Ground Shoal, to be connected by a screw pile pier, which would be constructed by a private company. He had a lesser scheme—to run out from the Carnac Bunder, past Cross Island, to the Middle Ground, a screw pile pier, with a T head measuring 4,000 feet in all.

6. A memorial was at the same time sent in by Messrs. Forbes and Co., agents for the Pier Company, signed by a number of merchants, European and native, to the effect that a system of dry and wet docks in Bombay was much needed. They made the proviso that the fees and rents chargeable should be moderate, and that the use of the docks should be optional. Messrs. Ritchie, Stewart and Co., Messrs. Nicol and Co., and Mr. R. Strong, considered wet docks unnecessary, and in some respects objectionable, and that landing piers, accessible at all times of the tide to an improved description of cargo boats, was all that was needed.

7. His Excellency Sir G. Clerk, in a minute dated 7th September 1860, reviewed the whole question of means of loading and

unloading vessels in Bombay, and of room for the warehouses for the mercantile community. He proposed to combine Captain DeLisle's and Mr. Kennelly's scheme by carrying out the reclamation plan of the ground, omitting docks and boat basins and, running out a screw pile pier from the reclamation opposite Cross Island, through it, and beyond exactly as proposed by Mr. Kennelly. He was assured that were Government to put forth authoritatively this really feasible scheme, and notify that it would give prompt permission to execute it either to one company or to several, the mercantile community would subscribe the capital required, without seeking for any guarantee from Government.

8. On this Captain DeLisle was called on to submit a concise statement with specification on the scheme as above suggested.

9. A resolution embodying the above decision of Government was communicated to promoters as per margin, and they were told that any proposals to take up the amended scheme, either as a whole, or in portions which may be submitted to Government, would be carefully attended to.

Messrs. Forbes and Co.
Messrs. Nicol and Co.
Mr. Green.
Mr. Fairbairn.

10. The plans and estimates prepared by Captain DeLisle on the amalgamated scheme, together with original schemes of Mr. Kennelly and Captain DeLisle, were sent to the Chamber of Commerce for information, and they were told that Government did not desire to support them in opposition to any other preferable plans which might be proposed.

11. In forwarding to the Government of India the first set of plans and estimates for the Moody Bay Reclamation prepared by Lieut-Colonel Scott, R. E., it was pointed out that the reclamation of this portion of the foreshore was purposely reserved to Government, when the rest of that frontage up to Mazagon was made over to a private company to reclaim, and in a late despatch the Secretary of State expressed the following opinion as to the propriety of keeping such reclamations in the hands of Government:—

Letter to the Government of India, No. 6310, dated 9th December 1862.

"As a general rule, all extensive reclamations in the neighbourhood of Bombay ought, in my opinion, to be effected by Government agency; indeed I cannot but regret that a different arrangement has been adopted in the case of the concession made to the Elphinstone Land Company."

12. In September 1864, the Government of India and Secretary of State were addressed on the subject of the Moody Bay Reclamation works, andit was pointed out that, with an assignment of funds limited to a share of the accidental surplus revenue of the year, this Government could neither secure the services of a competent contractor for the work, nor do it themselves, except by starving other necessary works.

13. On the 2nd November 1863, this Government furnished the Government of India with a brief history of the principal schemes for reclamations along the foreshore of the Island of Bombay, and in some lengthy remarks pointed out the absolute necessity, to ensure the most obvious economy, that the annual grants for these reclamation works should not be restricted to anything less than could be profitably expended. A further long correspondence ensued with the Government of India regarding the applicability of the budget rules to these large works.

14. In their letter dated 22nd November 1864, regarding the supply of funds for the prosecution of the Moody Bay works, the Government of India state that the unexpended balance of land sales in Bombay may be applied to this work; that the necessity for raising a loan on the security of the reclamation was not then apparent; and that the consideration of this course may be deferred until it is actually forced on the attention of Government.

15. In December 1865 Colonel DeLisle, in submitting a letter from the Executive Engineer for Reclamations requested the views of Government regarding the provision of wet docks in the Moody Bay scheme then under preparation, and was informed in reply that Government saw no reason to re-open the question; that the space is limited, and if floating docks are wanted, another site must be found; and that it was for the shipping interest to supply them.

No. of 1867.

Municipal Commissioner's Office,

Bombay, 21st January 1867.

To the Secretary to Government, P. W. Department.

Sir,—I have the honor to forward herewith a further report from Mr. Russel Aitken on the subject of a wet dock in Moody Bay. I regret very much that I did not receive it before H. E. the Governor's visit to Kenery.

It does not of course follow that docks are needed here because they are found indispensable in all the principal ports of England. Mr. Aitken accordingly argues this preliminary question at great length. It is for the mercantile community to judge whether the arguments advanced are sound or otherwise. I predict, however, with confidence that it will not be long before the Chamber of Commerce will pronounce in favour of docks, and that here in Bombay the advantage of docks over bunder boat basins will be so well established that the question will never again be raised.

The need for docks being established, it remains to show—first, that the site selected is suitable from a commercial point of view; secondly, that it is practicable to construct convenient docks on that site.

The first question is again one for the mercantile community to decide. From opinions I have heard expressed, I have no doubt on this head. The second is purely an engineering question, and cannot, I submit, be decided in this country, because there is no one professional engineer, altogether disinterested, or free from prejudice on the subject, and at the same time possessed of the experience necessary to qualify him for the position of umpire in so important a matter. I therefore respectfully suggest that when the whole question shall have advanced to this stage, it be referred for the opinion of one of the great dock authorities in England.

In the meantime, should Government receive or have already received professional reports on the scheme, I submit that in justice to Mr. Aitken they should be placed at the disposal of the press.

Mr. Aitken will of course be ready to explain what professional means he has adopted to satisfy himself of the practicability of the works proposed, and to state the results of the experiments he has made.

These last, so far as I am competent to judge, justify his proposals in a remarkable manner.

The last question of all is the agency by which the dock should be constructed and maintained.

This must, I apprehend, be left for the present for further public discussion, but the need for docks and their probable success from a financial point of view being once admitted, a Harbour and Dock Trust, constituted somewhat as suggested by Mr. Aitken, naturally suggests itself as proper agency, and one that will assuredly command more public confidence in Bombay after its recent bitter experience than any private company whatsoever.

I need scarcely say that it is not, and never was contemplated that the Municipality should have anything to do with the works. I only claimed that it should be represented in any Harbour and Dock Trust on the ground that it has a large direct interest in the question.

I have the honour to be, &c.,
(Signed) ARTHUR CRAWFORD,
Municipal Commissioner for the City of Bombay.

Municipality of Bombay,
Executive Engineer's Office,
Bombay, 5th January 1867.

To ARTHUR T. CRAWFORD, Esq.,
Municipal Commissioner for the City of Bombay.

SIR,—In compliance with your request, and in continuation of my former letters on the Harbour and Dock accommodation of Bombay, I have the honor to forward herewith a plan for a wet dock of 16 acres in Moody Bay.

The great advantages which must accrue to the sea-going trade of Bombay if wet dock accommodation is provided in Moody Bay instead of the bunder boat basins Government are about to undertake, will be at once apparent to any one who is at all conversant with the working of harbours and docks in England. As, however, the greater part of the influential European population of Bombay must have left England at an early age, they are without the experience requisite to enable them to form a correct estimate of the advantages of docks when compared with mere bunder boat basins; I shall, therefore, endeavour, even at the risk of being thought prolix, to explain every point as clearly as possible, although to many I may appear to be proving self-evident propositions.

The subject of dock accommodation in Bombay naturally divides itself into three parts.

First.—The relative merits of docks when compared with bunder boat wharves as a means of working the sea-going traffic of the port of Bombay.

Secondly.—If it be granted that docks possess superior facilities for this purpose, where should they be constructed?

Thirdly.—What administrative machinery is best suited for carrying out and properly working docks or similar works?

With regard to the first part, viz., the relative merits of docks when compared with bunder boats and bunder wharves as a means

of working the sea-going trade of the port, I confess I have some hesitation in enlarging upon this point, as the superior merits of docks are so numerous, and to those who are acquainted with the subject, so clear and well established, that to many I may appear to be wasting time if I should expatiate on them.

In every large harbour a system of bunder boats or barges has always been the first means employed for working the sea-going trade of the port, but as wealth and trade have increased this primitive mode has been abandoned. In well sheltered harbours, where the range of tide is only 4 or 5 feet, jetties are substituted, but when it exceeds 8 feet, docks are preferred.

In no other port in the world has the system of barges been more fully tested than it was in the port of London towards the end of the last century, yet notwithstanding the most perfect arrangement of organized labour, the delay and obstruction to trade caused by their use at length became unbearable.

In confirmation of these views I cannot do better than give an extract from a report by my relative the late Mr. James Walker, who was for so many years Engineer to the Admiralty, to the Trinity-house of London, and to many dock and harbour corporations, and although the report is dated December 1843, the subsequent experience of nearly a quarter of a century has only served to confirm the soundness and justness of his views:—

"The advantages of docks over tidal rivers or habours may either be considered as general, or with reference to the particular case of St. Helier."

"The first of these, is well known and fully appreciated in this country, from the experience of nearly half a century; so that the question is never raised. We have before us the best proof of the utility of docks, in the prosperity of almost all the ports in Great Britain, where they have been judiciously constructed, and the rapid increase in the size and number of docks which has been the consequence of the first successful attempt. London, Liverpool, Bristol, Hull and Dundee may be taken as proofs."

"London.—The River Thames, at London, is nearly 1000 feet wide, and of sufficient depth at the berths to float heavy laden ships at low water. The wharfage on each side is of considerable depth, and yet by far the greater proportion of ships with all cargoes, excepting such articles as coal and stone, prefer the docks, where they pay rates, to lying in the free river to unload. With one exception (the Greenland dock), the docks in the port of London have been formed during the present century. There are now seven Chartered Dock Companies."

"BRISTOL.—The port of Bristol was the *River Avon*. The docks of Liverpool were drawing away the trade of Bristol, until a new course was made for the River Avon, and its natural channel improved and converted into dock. The trade of Bristol has since revived and is now in a flourishing state."

"HULL.—Hull had the Humber in front of the town, and on the East, the River Hull, where the shipping business of the port was done. About sixty-five years since, a dock was formed; the consequent increase of trade demanded another dock, which was opened in 1809. In 1826, a third was found necessasy, which was opened in 1829, and now the trade is calling out loudly for more dock room."

"LIVERPOOL.—Every one that knows Liverpool is convinced that it owes almost its existence to its dock accommodation, and that increased trade has uniformly followed, as if it were, the consequence of increase of dock room."

"DUNDEE.—Dundee may be cited as another example: the improvement of its trade and rapid increase to be dated from the formation of its dock in 1825."

"Cardiff, Newport, Hartlepool, Seaham, and many others may be cited as proofs of the advantages of docks; but the cases already mentioned may be considered sufficient, without lengthening this report by further examples."

There is no fact more clearly established than this, that trade is almost, it may be said, created when facilities are given for working it, and that there is no more effectual way of stifling it or diverting it into other channels than by withholding these facilities.

That the trade of Bombay is at present carried on under very serious obstructions and drawbacks will at once appear when we compare the cost of unloading a ship by the bunder boat system with what it would be if it were unloaded in a dock such as I now propose should be constructed in Moody Bay.

In the following estimate I have compared the cost of loading and unloading a ship of 1,000 tons register by bunder boats and in docks.

Cost of present system of landing a miscellaneous cargo of 1,600 *tons in Bombay Harbour during the fair season.*

Pilotage fees	Rs.	85
Harbour dues	„	125
Steam winch on board ship, tackle, &c	„	500
Hire of bunder boats and cost of unloading 1,600 tons of cargo, and landing it on the bunders, including crane hire, &c. at Rs. 3 per ton	„	4,800

Loss and damage to cargo from pilfering, sea-water and from careless handling of packages	„	1,000	
Bunder fees	„	600	
Hire of ship of 1,000 tons for one month, including keep of crew, interest on capital, insurance, &c.	„	3,000	
Interest for half a month on value of cargo (10 lacs) at 9 per cent. per annum	„	3,750	
			13,860

Cost of present system of loading a cargo of Cotton.

Hire of ship for one month	Rs.	3,000	
Ballast 150 tons at Rs. 3	„	450	
Shipping 5,000 bales of cotton at annas 12	„	3,750	
Steam winch	„	500	
Interest for half a month on value of cargo (8 lacs) at 9 per cent. per annum	„	3,000	
Harbour dues	„	125	
Pilotage fees	„	85	
			10,910
			24,770

During the S. W. monsoon, or for 3 months of the year, the cost of landing and shipping a cargo is twice what it is during the fair season, as, however, only one-half the average monthly number of vessels arrive during that period, the cost for the whole year is only increased 10 per cent., so that the average cost throughout the year of unlaoding and loading a ship of 1,000 tons register may be taken at Rs. 27,500.

Probable cost of landing a cargo of 1,600 *tons in Wet Dock during the fair season and during the S. W. monsoon.*

Pilotage and harbour dues say	Rs.	100	
Towing ship into dock and berthing her alongside wharves	„	200	
Dock dues on ship of 1,000 tons at Rs. 2 per ton	„	2,000	
Cost of unloading 1,600 tons of cargo, and depositing it on the wharves, including hire of cranes, &c. at annas 6 per ton	„	600	
Damage to cargo whilst being unloaded	„	150	
Hire of ship of 1,000 tons for one week at 3,000 Rupees per mensem	„	700	
Interest for half a week on value of cargo (10 lacs) at 9 per cent. per annum	„	865	
			4,615

Probable cost of loading a cargo of Cotton in Wet Dock during the fair season and the S. W. monsoon.

Ballast 150 tons at Rs. 1½	Rs.	225	
Hire of ship for one month	„	3,000	
Dock dues on ship of 1,000 tons at Rs. 2 per ton	„	2,000	
Loading 5,000 bales of cotton, including crane hire, &c., at annas 2 per bale	„	625	
Interest for half a month on value of cargo (8 lacs) at 9 per cent. per annum	„	3,000	
Towing ship out of dock	„	200	
Harbour and Pilotage dues say	„	100	
			9,150
			13,765

From the above estimates it would appear that vessels using the proposed docks for loading and discharging cargo will be enabled to effect a saving of Rs. 13 per ton of their registered tonnage.

In the foregoing estimates I have taken the cost of bunder boat hire at Rs. 3 per ton, this is a low price, being below the average of the last three years. At the present time, however, in consequence of the dulness of trade, and the number of unemployed barges, bunder boat hire is a little lower than Rs. 3 per ton, but as soon as trade revives prices will again rise.

I have taken dock dues at Rs. 2 per ton. In England dock dues vary from 4 to 6 annas per ton.

Thus it would appear that if docks are constructed in Moody Bay instead of bunder boat basing, nearly half the cost of unloading and shipping cargo will be saved to the community, whilst for the same expenditure on works four times the amount of dues will be collected.

If, therefore, the total tonnage passing through the docks exclusive of ships with coal and such like materials, amounts to 300,000 tons register per annum, the annual saving to the community would be at least 39 lacs of rupees, and Government would gain in dues nearly 10 lacs per annum, if from this amount we deduct 1 lac for the extra working expenses of docks over bunder boat basins a clear annual profit of 9 lacs will be left in favour of docks.

A month is generally allowed to be the time necessary for discharging a ship by means of bunder boats, and although I have supposed the ship when in dock to take a week to unload, it can be done in much less time.

In proof of this I may mention that Captain Marder, of the

ship *Agamemnon*, informed me that he went into the East India Dock, and within 3½ days discharged 1,200 tons of general cargo took all the spars, masts, &c., (except the main mast) out of the ship, and went into dry dock.

Seven days is, however, a fair time to allow for discharging a ship in dock, and as the cargo is handed over to the Dock Trust whilst it is being discharged, the risk of loss from pilfering or damage by the weather is reduced to a minimum.

The saving of expense in loading and unloading a ship is not however the only advantage possessed by wet docks. If merchants knew they could depend on a ship being unloaded quickly, they would often take less freight, as a ship after discharging might sail out in ballast, and seek for a cargo elsewhere.

The greater certainty in conducting trade also would be no small advantage; at present, what with the heavy weather during the monsoon and the charges of boatmen, many traders can never say when they will get a cargo landed, or what it will cost to do so, and there must surely be something very wrong with a system which detains cargo on board steamers in the harbour for as long a time as is taken to bring it from Suez.

To those who have read the discussions which preceded the commencement of the first large docks in London (the West India Docks) the arguments I have heard in Bombay in favour of continuing the present system of bunder boats certainly would not present much novelty, as they are precisely those which were urged in favour of a continuation of the system of barging then in use on the Thames.

The construction and continued success of the West India and other docks subsequently constructed on the Thames have been the best answer to the arguments then urged with so much mistaken zeal.

The great argument urged against the construction of docks in Bombay is the difficulty of providing for the crew whilst the ship is being discharged, and in all these discussions it has always been assumed that a crew must necessarily be paid off as soon as the ship arrives in dock. Although it is usual for the crew of large sea-going vessels to be paid off when they arrive in dock in England, and the ships to be discharged by dock labourers, it does not follow that the same course must be pursued in Bombay. In docks in London and elsewhere the coasting and foreign vessels keep their crews on board, and I can see no reason why the same course should not be followed here. If, however,

there should be sanitary or other objections to keeping the crew on board-ship whilst she is in dock, barracks could be built for the sailors between the dock and the sea wall; these barracks could easily be kept isolated from the town, and as they would only have the Esplanade to the windward of them, they ought to be healthy.

It has been stated that in a tropical climate water in docks will soon become putrid, and thus be a nuisance to the neighbourhood. This is not a new argument against docks, and it is one which was repeatedly urged against the construction of the West India Docks in London, indeed it appeared so strong that the directors had at one time an intention to introduce fresh water from the River Lea. This idea was, however, wisely abandoned, as it would have necessitated the "locking" of every ship entering or leaving the docks, besides it has been found that when there are two entrances to a dock, the water can be frequently changed, and thus prevented from becoming a nuisance.

In selecting a site for docks there are two requirements of vital importance,—1stly, the dock should if possible be situated near deep water in the harbour; and 2ndly, it should be near to the warehouses and to the business part of the port.

With regard to the first requirement that the dock should, if possible, be situated near deep water in the harbour, this admits of no dispute, and a great part of modern dock-engineering consists in the construction of docks with entrances near deep water to supplement docks formerly constructed at the top of dredged entrance channels.

In proof of this I may instance the Penarth docks on which I was engaged for some time when under Mr. Hawkshaw, the eminent Engineer.

This dock of about 50 acres was constructed near to deep water in opposition to the Bute Docks at Cardiff, which are situated at the top of a dredged channel about three quarters of mile long. The consequence has been that the trustees of the Marquis of Bute, in order to be able successfully to compete with the Penarth Dock Company, obtained last year parliamentary sanction for the construction of docks with an entrance nearer the Penarth roads, and therefore more accessible.

The new docks at Newport and Bristol are now being constructed further down the river than the old ones, in order that they may be more accessible to shipping, and thus enabled to secure the trade of the ports.

It may be accepted as a well established fact, that docks having their entrance gates near to deep water will always be preferred to docks situated at the end of a dredged entrance channel, as no captain would choose the latter, and thereby run the risk of grounding his ship.

An examination of the chart of the harbour of Bombay will show that the two fathom line in outside Cross Island or half a mile from the face of the Elphinstone Land Company's sea wall, but, that further down the harbour it gradually approaches the shore until at a short distance above the mint it is only 50 yards from the face of the proposed sea wall of the Moody Bay Reclamation; this therefore being the deepest water close in shore naturally marks it as the spot near which the entrance lock of any docks should be placed.

With regard to the second requirement of a dock, viz., that it should if possible be near the warehouses of the Fort and native town, this also hardly admits of argument, for if it is not so situated either new warehouses must be built, or considerable expense must be incurred in carting goods from the docks to the present warehouses, which would be so much money wasted.

Docks situated in Moody Bay would be admirably situated for traffic, as they would be midway between the warehouses in the Fort and native town.

I have thus shown that the Moody Bay Reclamation being situated close to the deepest water in the harbour, and to the warehouse of the Fort and native town, is from these very facts the proper site for docks. I shall now proceed to give the reasons for the design which accompanies this report.

For facility of reference I have also given a plan of the bunder boat basins now being carried out by the Government.

On looking at this plan for bunder boat basins, the first thing which suggests itself is, where are the bunder boats to come from to utilize this proposed three or four miles of wharves.

As I remarked in my former letter, the bunder boat accommodation now being provided by the Elphinstone Land and Press Company, (exclusive of the two basins they propose to turn into docks) is equal in length to twice the whole of the bunder boat wharves of the town to years since, and yet this scheme for bunder wharves in Moody Bay nearly doubles that now provided by the Elphinstone Land Company.

I am quite willing to admit the elasticity of trade, and more especially that of Bombay, when the Railway system becomes de-

veloped, but a little consideration must convince any one that the bunder boat traffic cannot expand with sufficient rapidity to necessitate so large an expenditure for such a primitive and wasteful method of working trade.

Again, it is well known that works are only remunerative when they are adapted to the trade they will have to work. If bunder boat wharves are built in Moody Bay, the walls will be about 27 feet high, whereas a wall a little higher will suffice for working traffic in a dock in which the largest ships might come alongside the wharves.

I have availed myself of the order of His Excellency the Governor in Council, and have taken the means usually adopted by engineers, to satisfy myself of the practicability of the works I have recommended in this report.

Lieut. Ducat, R. E., Executive Engineer for Reclamations has also given me every information in his power, and I have obtained copies of his very careful and elaborate surveys.

The result of these investigations confirms my former statement, that there will be no engineering difficulty in obtaining an entrance lock having 28 feet of water on the cill at high water of ordinary spring tides, and 25 feet at high water of neap tides, or even a greater depth if it should be thought necessary.

The depth of water on cill I now propose is the same as the Victoria Dock, London, which, as is well known, accommodates the largest class of iron-clad ships of war.

I have provided "sea gates" to the lock, which point outwards and can be closed in stormy weather. By this means, although there may be a heavy sea in the harbour, the inner gates will be thoroughly protected.

There are docks in England the sea gates of which have successfully resisted heavier waves than there can ever be in Bombay harbour, even during a cyclone.

From an inspection of the accompanying plan it will be seen that I propose a lock 400 feet long and 80 wide; this is a longer lock than that of the Victoria Dock, to which I have before referred, but is of the same width. The object of having so large a lock is to save time, as 3 or 4 large ships or steamers could be locked at once.

It will be observed that on the west side jetties are shown to project from the sides of the dock; by this means the effective length of wharf is doubled, and a large number of ships can be

brought under the hydraulic cranes, with which every dock ought to be fitted.

Whether these jetties should be made of iron or stone, or whether there will be any necessity for building walling round the dock, are questions it is not now necessary for me to enter into, it will be sufficient if I again assert that this large dock, including locks, jetties and every appliance can be made for a less amount than the bunder boat basins about to be undertaken.

It may be said that excavating the dock will be a very expensive affair, but it should be remembered that the stone so excavated will be used in building the walls of the dock and locks; even if this rock should only be used for filling, it will be cheaper to excavate it for that purpose than to bring sand from a distance. Not only this, but a rocky bottom is a positive advantage, and will enable docks to be constructed in Moody Bay at a cheaper rate than usual. I write on this point with considerable confidence, as I have been engaged on several very difficult dock works in England. The difficulty has always been that the bottom is too soft, docks in England being generally situated on recent alluvial deposit. At Hull for instance Mr. Hawkshaw is about to found a lock on 12 or 13 feet of concrete in addition to the usual invert.

There is at present a great want of Graving Dock accommodation in Bombay, and I believe Government contemplate building a dock for the use of the new large transport service steamers.

It may be worthy of the consideration of Government whether the entrance lock of the proposed dock might not suffice until the two Graving Docks I have shown on plan could be completed.

I know of no other place in the harbour of Bombay where a Graving Dock could be constructed so rapidly, or under such favourable circumstances, or where a greater depth of water could be obtained close to the town.

I am under the impression that the Admiralty construct the locks of their steam basins, so that on an emergency they can be used as Graving Docks. There is, however, no difficulty in adapting the lock for this purpose.

As the Graving Docks I propose have their entrances from the wet dock, ships will be able to use them in all weathers and with less ballast than they would require if they had to be taken out into the harbour. More vessels also can be inspected and repaired than would be possible if ships were dependent on the tides for obtaining entrance in the Graving Docks, and there is but

little risk run in docking, as the ship not being in a tide way is more easily handled.

When writing my former letters proposing wet docks in Moody Bay, I was not aware that a similar proposal had been made by Mr. Edwin Heycock nearly 12 years ago, but that it had for various reasons been abandoned. It was when I was engaged on my report of the 20th June 1866, proposing a road (since sanctioned by Government,) from the Fort to the Elphinstone Reclamation, and thence over the G. I. P. Railway Station to Mazagon, that I noticed the great advantages possessed by the Moody Bay Reclamation as a site for docks.

Mr. Price, acting Master Attendant and Conservator of the Fort, has kindly furnished me with a return of the number of steamers and square-rigged sailing ships entering the harbour of Bombay during the last three years.

From this return it would appear that on the average 300 steamers, measuring 143,000 tons, and 592 square-rigged vessels, measuring 518,000 tons, annually entered the port.

On referring to a Government paper dated 25th December 1855, relating to the former proposal for docks, I find the tonnage of square-rigged vessels entering the port is estimated by the then officiating Commissioner of Customs at 160,000 tons.

So that it would appear that the sea-going tonnage of the port has increased about 300 per cent. in 10 or 11 years.

If the number of ships entering the harbour should increase in the same ratio during the next six years (by which time the proposed docks ought to be in good working order), the tonnage will have increased to 1,400,000 tons. Thus, although the construction of docks could not have been judiciously commenced in 1856, that is no reason why they should not be undertaken.

Having thus, I hope satisfactorily, proved that Moody Bay is the best site for docks in Bombay, and that there will be no difficulty in obtaining the necessary depth of water to accommodate the largest class of sea-going ships, I shall proceed to give my reasons for recommending that these works should be carried out by a Harbour and Dock Trust, and not by the Government or by a private company.

Almost every one in England is agreed that when works of this kind are undertaken by Government they progess but slowly, and are generally unsatisfactory in their results, Government having necessarily so many more important and urgent matters to attend to that it cannot give that sustained and experienced supervision

to every detail and to the exigencies of trade which such works require, and without which they are almost certain to end in failure.

The legitimate business of Government is to lend its countenance to such works, and if necessary (in a country such as India) to give monetary assistance.

Again, it is very generally admitted that private companies are not the proper persons to be exclusively entrusted with providing facilities for the trade of a port.

Any one who has compared the Docks in London with those in Liverpool must be convinced of the truth of this.

In London we have a number of chartered Dock Companies, all of whom are naturally striving to pay as large a dividend as possible to their shareholders. The consequence is that economy rules the day, and new works are not undertaken unless they are as it were forced upon the companies.

In proof of this I may instance the West India Dock Company. This Company was, as I before stated, originated at the end of the last century, and the first directors no doubt carried out the works in a magnificent and public-spirited manner, and the docks were admirably suited for the class of shipping for which they were designed. As however vessels increased in size, there was not sufficient depth of water on the cills of the locks.

The directors were well aware of this, but they allowed the trade of the docks to languish for 20 or 30 years rather than venture the amount necessary for meeting the necessities of trade.

It was only when Parliament granted powers to a new company to construct docks alongside them that the directors of the West India Docks awoke to a true sense of their duty or rather their interests, and called in Mr. Hawkshaw to design a new dock.

The Hull Dock Company only undertook their new dock (at present in course of construction) after they became aware that the North Eastern Railway Company were about to apply for powers to make a dock at Hull.

A harbour and dock trust on the other hand is from the very nature of its constitution prevented from falling into the mistakes which characterize private companies. It has only to look to its own credit, or rather to the payment of its creditors, and has not to satisfy shareholders, who as in the case of the West India Dock Company, when a dividend of 8 per cent. was declared, naturally looked for one of 9 per cent. next year.

I am of opinion that a harbour and dock trust is necessary for the

trade of Bombay, and that if it be not now constituted, it will sooner or later be forced on Government.

I am willing to admit that there are places, such as London, where a harbour and dock trust may not be of vital importance to the welfare of trade, but it must be remembered that the frontage of the River Thames is practically unlimited, and any number of docks may be constructed along its banks. There is therefore no danger of trade suffering for want of dock accommodation if it is found to pay to construct them, or of any dock company having a monopoly of the trade of the port. In Bombay, however, the harbour frontage of the town is barely four miles in length, and the number of sites where docks can be constructed is limited to a small area which must, as at Liverpool, be made the most of.

From the many conversations I have had with merchants and others, I am convinced that if a Harbour and Dock Trust were formed on a broad and substantial basis it would receive the support and confidence of three-fourths of the community, and that it would in a short time absorb all the private bunders in the Island.

The comparative merits of Companies and of Dock Trusts as a means of working the trade of a port can only be learned by experience, and any theorising on a subject such as this is useless. From my own experience of ten years in two of the largest Hydraulic Engineering offices in London I can safely say, that whenever it is required to carry out large and comprehensive schemes, it becomes necessary to have a trust, but that a company may safely be entrusted with the execution of any particular work from which it may reasonably expect to receive an immediate return.

All the great improvements of rivers and harbours in England have been made by Dock or River Trusts; for instance the improvements lately carried out on the Clyde and the Tyne, and the docks at Liverpool and Birkenhead.

The experience gained from the construction of the Birkenhead docks may well deter Government from entrusting the dock accommodation of the port exclusively to private companies.

The Birkenhead docks were originally begun by a company, which after spending many hundred thousand pounds sterling on their construction at length failed, and the Liverpool Harbour and Dock Trust have been obliged to finish the works.

A Harbour and Dock Trust can always do its work cheaper than a private company, as it can raise money at a much easier rate of interest.

It should further be remembered, that when a large dividend is paid by any dock company, it only means so much more money wrung from commerce than would have been necessary if a Dock Trust had been constituted in the first instance.

A Harbour and Dock Trust in Bombay should be mainly composed of the merchants whose ships will use the docks, it should also have representative members of the Government and of the Municipality.

The number of members of which the Trust should be composed may be a subject for future discussion, but I am of opinion that the representatives of the merchants of Bombay should have the largest number of votes, and Government would do well to avail itself of their experience and business habits to carry out an undertaking, which will be of such importance to the Town and Presidency.

There can be no doubt but that, if the requirements of any particular trade had to be met, docks might be constructed in other places. Thus the cotton trade of Guzerat might require a dock at Colaba, and perhaps the dock for the import trade might be situated nearer the native town, but the commanding position the Moody Bay docks would occupy naturally indicates it as the first place where there should be constructed. Docks if placed there would be midway between the goods termini of the two Railways, and accessible to the waggons of both. They would be equidistant from the warehouses of the Fort and of the native town, and from the cotton presses in Colaba and the Fort, and from the existing presses, and those which doubtless will soon be erected on the Elphinstone Reclamation. They would be near the Custom House and to the offices of the European merchants in the Fort; passengers, baggage and mails from Calcutta and Madras could be at once transferred to mail steamers in dock, which the G. I. P. terminus immediately adjoins.

It may be urged that if Government surrenders Moody Bay to a Harbour and Dock Trust, it will be giving away a large area of most valuable land, and that if Government carry out the lunder boat basins, they will be able to dispose of the land so reclaimed at an enormous profit.

Land in Bombay is not of the same value it was during the share mania, as it now realises only half the amount it then did.

If therefore Moody Bay be reclaimed, the seawall and expensive wharves now contemplated constructed, the necessary land given up for roads, and interest calculated on the capital expended in the reclamation before it has been made available for sale, I think it will be found that the profit which now looks so well on paper will be reduced to a very small sum.

In addition to which the Elphinstone Land Company will soon have a large amount of land in the market, and then doubtless still further reduce any possible profits.

It should also be remembered that the proposed dock is but 17 acres larger in area than the bunder boat basins, which are designed to have an area of about 29 acres.

Further, it is generally understood that it is the duty of Government to foster and promote trade by every means in its power, and it would be a manifest injury to the town if it were to allow the small present gain such as would result from the sale of 17 acres of land to stand in the way of a great public improvement, by which it would be benefitted in a thousand different indirect ways, in addition to the large direct annual returns which would be obtained from dock dues.

It is almost impossible to conceive the amount of indirect taxation which can be imposed on trade by having insufficient means for working it. For instance, the level crossings over the Great Indian Peninsula Railway cost the community about 3 lacs of rupees per annum in cart hire alone, if we add to this the loss of labour caused by the want of overbridges, the annual loss cannot be far short of five lacs of rupees. However perfect a system of bunder boats may be, it must always be a kind of level crossing and a grievous tax on the sea-going trade of Bombay, and I think Government may without loss of dignity reconsider a decision arrived at ten years ago, when the tonnage of ships entering the harbour was not one-fourth of what it now is, and I am strongly of opinion that what might then have been deemed quixotic and rash, is now an absolute necessity for the present and prospective trade of the port.

I have the honor to be, &c.,

(Signed) Russel Aitken,

Executive Engineer to the Municipality.

No. 31 of 1867.

Bombay Chamber of Commerce,
8th March 1867.

Colonel W. Kendall,
Secretary to Government.
Public Works Department, Bombay.

Sir,—I have the honor by direction of the Committee of Management of the Chamber of Commerce to acknowledge the receipt of your letter of the 8th ultimo inviting the attention of the Chamber to two reports by Mr. Russel Aitken, Executive Engineer to the Municipality, on the construction of wet docks by Harbour Trust in Moody Bay—and also to two important and valuable letters from Colonel De Lisle, R.E. on the same subject, and to express their regret that your communication has not been acknowledged earlier.

Government is doubtless aware, though the matter has not been officially communicated, that at a general meeting of the members of the Chamber specially held for the consideration of the question of wet docks for Bombay, after some discussion a committee of members was appointed to take the whole subject into consideration and to report their views to the Chamber within three months from the date of appointment.

Referring to the fourth and fifth paragraphs of your letter in reference to the appointment of a committee of gentlemen—native as well as European—connected with the Mercantile Shipping Railway and other interests who might be disposed to assist Government in investigating the subject in conjunction with the gentlemen mentioned in your letter,—the Committee of management of the Chamber respectfully suggest to Government the names of the gentlemen specified below who represent the various interests that have to be considered and are otherwise in the opinion of the Committee well qualified to afford Government the assistance it may need in deciding on this important question.

I have the honor to be, &c.,
(Signed) James Taylor,
Secretary.

Gentlemen recommended by the Committee of Management of the Chamber of Commerce to serve on the Committee to be appointed by Government for the investigation of the question of wet docks in Moody Bay :—

Major General H. Rivers, Agent of the G. I. P. Railway Company.

C. Currey, Esq., Agent of the B. B. & C. I. Railway Company.

Captain G. H. Henry, Superintendent of the P. & O. Steam Company.

A. Brown, Esq., of Messrs. W. Nicol & Co.

G. M. Stewart, Esq., of Messrs. Remington & Co.

A. F. Wallace, Esq., of Messrs. Wallace & Co.

Peter Adams, Esq., of Messrs. Edward Bates & Co.

A. D. Grant, Esq., of Messrs. Campbell, Mitchell & Co., Agents to Lloyds.

Dinshaw Manockjee Petit, Esq., Parsee Merchant.

Hajee Esmal Hajee Abdoola, of the firm of Hajee Abdoola Noor Mahomed, Mahommedan Merchants and Shipowners.

Extract from the Proceedings of the Government of Bombay in the Public Works Department, dated 30th March 1867.

RESOLUTION.—The Gentlemen named should be asked to form themselves into a Committee, in conjunction with those nominated in paragraph 4 of Government letter No. $\frac{152 \text{ C. W.}}{344 \text{ M.}}$ dated 8th February 1867, to consider the question of wet docks in Bombay. Among the points which should primarily engage their attention are—

1*st*.—Are Mr. Russel Aitken's estimate of the comparative cost of loading and unloading ships in the open harbour and in wet docks sufficiently accurate to afford a fair basis for estimating the probable income which can be derived from wet docks? If not, what corrections are needed?

2*ndly*.—Can this income be relied on without legislation to make the use of the docks compulsory?

3*rdly*.—If not, can resort be had to such legislation without injustice to those who in a capacious haven like Bombay, do not desire to use wet docks?

2. Captain Methven, of the P. & O. Company, should be asked to join the Committee.

3. Government would suggest that after a preliminary oral discussion, the Committee should, if they think fit, delegate the collection of further evidence to a selected member of their body, meeting to discuss any doubtful points orally before the final report is adopted.

4. Government would also suggest that any Committee of the Chamber of Commerce should be moved to submit their report in a shorter period than three months, as it would probably be some time after such report has been received before the Chamber would find itself in a position to report its final adoption.

(Signed.) Lieut., R. E.,
Under Secretary to Government.

No. 51 of 1867.

Bombay Chamber of Commerce,
8th April 1867.

Lieut. T. Dowden,
Under Secretary to Government,
Public Works Department, Bombay.

Sir,—I am directed by the Committee of Management of the Chamber of Commerce to acknowledge the receipt of the Government resolution dated 30th ultimo, appointing a committee of gentlemen consisting of those whose names were suggested by the Chamber at the request of Government; together with the gentlemen nominated in para. 4 of Government letter dated 8th February to consider the question of wet docks in Bombay.

With reference to para. 4 of the resolution under acknowledgment, I am to state that the report from the special committee appointed by the Chamber to consider the question of wet docks in Bombay, is expected to be sent in by the end of the present month, and no time will be lost in making Government acquainted with the same after it has received the sanction of the Chamber.

I have the honor to be, &c,
(Signed) James Taylor,
Secretary.

Bombay, 17th April 1867.

To the Secretary to the Bombay Chamber of Commerce, Bombay.

Sir,—I have the honor to request that you will be good enough to inform the Chamber that the committee appointed by it to con-

sider the dock question has (in accordance with what they believe to have been the wish expressed at the recent meeting of the members of the Chamber) merged itself, by the appointment of some of its members in the committee formed under the orders or wish of Government, thoroughly to investigate and report on the whole question.

The dock committee presume that the Chamber does not require that it should continue a separate investigation. The committee consider that such would be unnecessary and undesirable.

I have the honor to be, &c.

(Signed) A. F. WALLACE,

APPENDIX K.

REVISION OF THE STAMP DUTIES.

No. 2036 of 1867.

Revenue Department,
Bombay Castle, 29th May 1867.

To the Secretary to the Chamber of Commerce, Bombay.

Sir,—I am directed by His Excellency the Governor in Council to forward herewith, copies of the documents noted in the margin, relative to the proposed amendment and consolidation of the whole law on the subject of stamp duties, and to request that the Chamber will be pleased to nominate three members for the purpose indicated in paragraph 1 of the Government resolution.

Circular from the Government of India No. 2281 dated 30th April 1867, with accompaniment,
Government resolution No. 2035 dated 29th May 1867.

I have the honor to be, &c.,
(Signed) H. E. Jacomb,
Under Secretary to Government.

No. 2035.

Revenue Department,
Bombay Castle, 29th May 1867.

Circular from the Government of India No. 2281, dated 30th April 1867—intimating that in the next Session of the Legislative Council of His Excellency the Viceroy, it is proposed to amend and consolidate the whole Law on the subject of Stamp Duties; forwarding a precis of certain suggestions already made for the amendment of the Act; and requesting that the subject be taken into careful consideration, and the conclusions on it submitted not later than the 1st of August next.

Resolution.—The Chamber of Commerce should be asked to nominate 3 members, who, with the Commissioner of Customs, the

superintendent of stamps, and (with the permission of the Chief Justice and Judges of Her Majesty's High Court) the Registrar of the High Court, should form a Committee (with power to add to their number) for the purpose of considering this subject, and furnishing the report asked for by the Government of India.

2. Copies should also be sent to all Collectors of Stamp Revenue for careful report after consulting any persons whose opinion they think of value. These reports should be sent through the Revenue Commissioners.

3. The Oriental Translator should be requested to prepare a glossary of the nature required in the 7th paragraph of the letter from the Government of India.

4. Copies should be forwarded to the Commissioner in Sind for information and guidance, and these papers should be printed as a Supplement to the *Government Gazette*, and placed in the Editors' Room.

Acting Chief Secretary to Government.

Circular No. 2281, Government of India, Financial Department, Separate Revenue.

Stamps.

To the Secretary to the Government of Bombay..

Fort William, 30th April 1867.

SIR,—In the next Session of the Legislative Council of His Excellency the Viceroy, it is proposed to amend and consolidate the whole Law on the subject of Stamp Duties.

2. Schedule B of that Law has already been amended by Act 29, 1867, but certain of the amendments made are of a tentative nature, and it is therefore advisable to watch carefully the working of the new schedule, in the interval between the present time and the next session of the Legislature, and a separate Circular has been addressed to you with that object.

3. The Stamp Act (X. of 1862), and Schedule A of that Act especially are said generally to be defective in this particular, viz., that their provisions are so wanting in clearness and proper arrangement that the public is unable to understand, either wholly or only after much research, what the duties are that in the execution of documents the Law requires them to pay.

4. The object, therefore, of the proposed amendment of the Act is, without any material sacrifice of Revenue, so to express and re-arrange the Act and its Schedules as that the public may see at a glance what the duties are which the Law requires them to pay.

5. The best way of attaining to this object would seem to be to appoint Local Committees in every large town or chief station of a district, and to direct such Committees to consider and report upon every Section or Article of the Act which seems to them to require amendment.

6. The Superintendent of Stamps and European and native members of the Chambers of Commerce would seem to be gentlemen in a position rendering them proper persons to constitute these committees in Presidency towns, and Collectors and indepent merchants would seem to be equally proper persons to constitute these committees in district stations.

7. A glossary of the various terms used by the European and native communities to denominate particular documents used in mercantile and other transactions, and a brief description of the usual tenor of each particular document, would be very useful, and so also would be any suggestions by which the various scales at varying percentages under Articles 10, 12, 23, 40, 54, Schedule A, could be converted into uniform scales at an uniform percentage on the decimal system.

8. Annexed is a precis of certain suggestions already made for the amendment of the Act in question.

9. It should be remembered that several attempts have without success been made of late years to introduce a Stamp Law easy of comprehension, and it is, therefore, hoped that the suggestions now to be made with this object may be well and carefully considered.

10. The Governor General in Council requests that the subject be taken into careful consideration, and the conclusions on it submitted not later than the 1st of August next.

I have the honor to be, &c.,

(Signed) E. H. LUSHINGTON,
Secretary to the Government of India.

No. 81 of 1867.

Bombay Chamber of Commerce,
11th June 1867.

To H. E. JACOMB Esq.,
Under-Secretary to Government.
Revenue Department, Bombay.

SIR,—I am directed by the Committee of Management of the Chamber of Commerce to acknowledge the receipt of your letter No. 2036 of 1867 dated 29th ultimo forwarding copies of circular from the Government of India on the subject of the amendment and consolidation of the whole law on the subject of stamp duties —together with the Government resolution thereon—and requesting the Chamber to nominate three of its members to take part in the proceedings of a committee about to be appointed by Government for the purpose of considering the subject.

In reply I am to inform you, that the committee respectfully suggest to Government—the appointment of

(1). Mr. H. E. Astley, of the firm of Messrs. Ewart, Latham & Co. and Deputy Chairman of the Chamber.

(2). Mr. H. Somerville, of the firm of Messrs. Lyon Brothers & Co.

(3). Mr. Robert Campbell, agent to the Chartered Mercantile Bank of India, London and China.

as gentlemen well qualified to serve on the committee.

I have the honor to be, &c.
(Signed) JAMES TAYLOR,
Secretary.

No. 2401 of 1867.

Revenue Department,
Bombay Castle, 26th June 1867.

To the Secretary Bombay Chamber of Commerce.

SIR,—I am directed to acknowledge the receipt of your letter dated the 11th instant, and, in reply, to inform you that, on the recommendation of the Chamber, Government are pleased to appoint the Gentlemen named as Members of the Committee to be assembled for considering the proposed amendment and consolidation of the whole law on the subject of Stamp duties, and their appointment will be notified in the next issue of the Government Gazette.

I have the honour to be, &c.
(Signed.) H. E. JACOMB,
Under-Secretary to Government.

APPENDIX L.

WEIGHTS AND MEASURES.

No. 1445, OF 1867.

General Department,
Bombay Castle, 14th August 1867.

To the Secretary to the Chamber of Commerce,
Bombay.

SIR,—I am directed to forward the accompanying Extract from the proceedings of this Government No. 1444 dated 14th instant relative to the introduction of a uniform system of weights and measures into India, and to request that you will have the goodness to favour the Right Honorable the Governor in Council with the opinion of the Bombay Chamber of Commerce on the subject.

I have the honor to be, &c.,
(Signed) H. E. JACOMB,
Under-Secretary to Government.

Read the following Memorandum by the Honorable M. J. Shaw Stewart, Acting Chief Secretary to Government of Bombay, dated 2nd August 1867, with accompaniments.

I beg most respectfully to submit to the Honorable Board copy of a Memorandum and Draft Act, which I drew up for the consideration of the Government of India on the subject of Indian Weights and Measures.

2. Having been appointed a member of the committee which is to meet in Calcutta on the 15th November to consider this question, I should be much aided in my duties if I knew the opinion of the public of this Presidency on the question. I am aware that scheme has been submitted by a Committee that sat some years ago, but I fear that the introduction of that and other

schemes which were sent in from different parts of India will be exceedingly difficult from two causes which I have tried to avoid in my plan—the elaborate nature of the metrical systems proposed, and the absence of any practical proposition for ensuring its general introduction.

3. I beg therefore that Government will be so good as to allow the Memorandum and Draft Act now submitted to be circulated to its officers, with the object of eliciting their opinion and those of the public.

A. F. Bellasis, Esq.
Colonel DeLisle.
Mr. A. Grant.

4. Besides the Commissioners, Collectors and other Civil and Political officers, I should desire to know the opinion of the Railway Companies, the Chambers of Commerce the larger Municipalities, the Commissariat and Ordnance Departments, and specially of the gentlemen who composed the Committee of 1864, and perhaps the Right Honorable the Governor in Council will permit the proceedings and report of that Committee, as well as the letter with which that report was submitted to the Government of India, to be reprinted and circulated along with the papers that I now submit. There is also a report from Lieutenant Colonel Keatinge regarding the introduction of weights and measures into Katteewar, which contains some very practical suggestions and useful remarks.

5. I may mention as regards the first part of the Draft Act, that it really matters comparatively little what scheme is adopted, provided it is simple and likely to meet the wants of the people. The great *desideratum* is to fix some scale and then to get into general use, and for this reason I consider the second part of the Act as far the most important, and am anxious to know if it is considered practically possible in this Presidency.

6. There is a point on which I should like to know if the general experience of Magistrates is the same as mine has been. I have always found that the diversity of weights and measures presented a practical obstacle to carrying out properly the law against false weights and measures. If a man is charged with using a seer of short weight he can frequently find some local custom authorising the use of a seer of less than 80 tolas, and on the other hand, when the custom requires him to sell by a seer of 90 or 93 tolas, he can readily defend himself for using an Imperial seer of 80 tolas, though by using it he cheats his customers, I do not say that the defence is good, but the possibility of it has been found to add greatly to the difficulty of enforcing the law in the way it ought to be enforced in this country.

[Accompaniments to the above.]

Memorandum by the Honorable M. J. Shaw Stewart, dated 7th February 1867.

Having had my attention drawn of late years to the necessity of reforming our system of weights and measures, and expecially so by natives of India, I have perused the papers on the subject that are in the Home Office, and am of opinion that reform is called for, and not attended with any great difficulties. In submitting this Memorandum and a Draft Act that I have drawn up for the consideration of His Excellency tht Governor General in Council, I beg to express my willingness to take charge of the introduction of the Bill, if its general principles be approved.

2. The papers clearly show that the want of a uniform system of weights and measures throughout India has long been felt as an evil scarcely tolerable, and that it would have been remedied ere now had it not been for the difficulty of deciding what scale was the best to adopt. The decision of this point was rendered more difficult from the uncertainty whether the decimal system would be introduced into England. There is little prospect of this being done now, and in the meantime the whole retail trade of India suffers from the disgraceful cheating that the unrestricted use of many various scales gives room for.

3. The remedy divides itself into two main points for consideration—(1), the selection of a scale; (2) the measures necessary to introduce the scale into common use.

4. As regards the selection of the scale, most of the plans proposed strove to combine three points—

(1)—The adoption of the English pound avoirdupois as a unit.

(2)—The decimal system.

(3)—The retention of some of the Indian weights and measures in conjunction with the English pound.

5. The decimal system is practically abandoned in England, and is not so necessary in India, where the people have always been accustomed to count by 'fours' rather than by 'tens.'

6. The retention of the present terms, seer, maund, or any attempt to assimilate our standard weights to them, or to refer to them in any way, is undesirable, as being certain to lead to confusion if not to increase that now existing.

7. It seems better to adopt an entirely new scale, with new nomenclature and none is so unobjectionable as the Imperial avoirdupois scale of England, which includes the multiples of 16, and the pound avoirdupois should be the unit of weights.

8. The unit of capacity should be the gallon.—a measure containing a certain weight of pure water—and the scale should ascend and descend in multiples and submultiples of the unit. It is not necessary to adopt the numerous measures of capacity used in the English scale, as no such measures are now used in India or apparently required, the seer and its multiples and submultiples being the only measures used. The "gallon scale" will also serve, as does the "seer scale" now in use, for both liquid and solid capacities.

9. The English yard should be the unit of length.

10. The first part of the draft Act declares the Indian weights and measures, and provides for the custody of special standard in the Mints at Calcutta, Madras, and Bombay, and ordinary standards at Collectors' Cutcherries and other places throughout the country. The special standards in the Mints will not of course be of much practical use, but the formality will give importance to the measure. The other standards will be available for constant use and reference.

11. The second part is the most important. It is useless to declare scales of weights and measures unless these are used, and they will never be used generally without a certain amount of compulsion. The class who must be compelled to use them are the small shopkeepers who sell the necessaries of life. When this is done the rest will follow. It is proposed therefore to insist gradually on the use by all such retail dealers of the new scales, and it will be for the Executive Governments to see that every facility is given for their supplying themselves with any weights and measures they require at the lowest possible price. The change to the new system must, though gradual, be as complete as possible, and retail dealers must therefore be absolutely prohibited from possessing or using any other weights or measures But there are cases where retail dealers, such as druggists, &c., may be in the habit of selling other articles besides the necessaries of life, and for which other special scales are commonly used, and for such persons a special licence will be given on application and on certain conditions. The adoption of the new scales will also be enforced on all public companies.

12. Legislation cannot go farther than this point; it must be left for local and Municipal rules to reach those who do not come under the head of retail shopkeepers, such as country people who come in to sell at markets or bazaars, and for this provision is made in the Bill.

13. The Act must be supplemented by an alteration in all existing Acts where measures of weight or capacity or length other

than the "Indian measures" are made use of. The Acts relating to customs, salt, and opium will be those most affected. These alterations will doubtless be carried out by the various legislatures concerned.

14. It will also be necessary to instruct all public officers and Municipal bodies to make use of the "Indian weights and measures," so far as practicable, in all transactions in which they are concerned in their public capacity.

15. Proposals have been made for fixing a uniform scale of superficial area for the whole of India, but this does not seem to me so practically necessary as the other scales, though it may be desirable as affording a standard of comparison as regards statistics of land revenue. Land is not bought and sold by retail, nor does it form the subject of sale between persons of different Presidencies. The adoption of a uniform unit of area throughout India, though very desirable, does not seem so necessary as to justify the alteration of the land settlements which it would entail.

16. I do not put forth this scheme as showing either originality or completeness, but it is simple, and will, I think, be effective; and it is certainly desirable that some proposal should be placed before the public with the object of eliciting opinions that may lead to a final settlement of this question. It may be doubted whether, as we are going to have an entire abandonment of existing weights and measures, it would not be better to adopt the decimal scales at once, instead of the old English scales which have been declared so inferior to the decimal system. For my own part I think that assimilation to English scales, whatever they may be, is a point of greater importance than the adoption of a decimal system. The publication of this Bill will probably elicit valuable opinions on this point; but whatever scales be adopted, it seems to be most desirable that no time should be lost in declaring them, and that the plan of introduction sketched out in the second part of the Draft Act or some similar plan, should be adopted.

Draft Act.

Whereas it is desirable to fix a uniform scale of Weights and Measures for India, and to make special provision for the adoption of that scale for the retail sale of the ordinary necessaries of life: It is enacted as follows:—

I. This Act may be cited as "The Indian Weights' and Measures' Act of 1868," and shall consist of two parts. The first

part shall take effect from the time of passing the Act, and the second part shall take effect in the manner prescribed in Section IX. and not otherwise.

II. In this Act the following words shall have the meanings set opposite them, unless there be anything in the context repugnant :—

Indian weights and measures shall mean the weights and measures described in Sections III. IV. and V. of this Act

Retail dealers shall mean every person who keeps a shop and sells by retail any or all of the articles described in Schedule A of this Act.

Local Government shall include every Chief Commissioner or other officer whom the Government of India shall authorise to exercise the powers of a Local Government for the purpose of this Act.

PART I.

III. From the time of passing this Act the Indian measures of weight shall be the same as the Imperial avoirdupois weights of England, that is to say—

16 drams to the ounce.
16 ounces to the pound.
14 pounds to the stone.
28 pounds to the quarter.
112 pounds to the hundredweight.
20 hundredweights to the ton.

IV. From the time of passing this Act the Indian measures of capacity shall be the gallon and its multiples and submuitiples ; the gallon shall be a cylindrical measure, the contents of which when filled with pure water shall weigh exactly pounds avoirdupois.

V. From the time of passing this Act the Indian measure of length shall be the Imperial yard of three feet, or thirty-six inches.

VI. A standard Indian pound, and seer, and yard, shall be kept in the Mints of Calcutta, Bombay and Madras, under the custody of the Mint Masters, in boxes with three secure locks, the keys of which shall be retained by the Chief or Senior Secretary to the Government of Bengal, Madras, and Bombay respectively, and by the Chief Municipal Commissioners of those towns, and by the Mint Masters ; and these boxes shall not be opened, except by the order of the Government of India or Local Government.

VII. Standard Indian weights and measures shall be kept by all Collectors of Land Revenue, or officers exercising the powers of

a Collector, and by such other officers as the Local Government may direct. These standards shall be examined and verified at least once in every period of ten years, under such rules as may from time to time be issued by the Government of India.

VIII. The officers in charge of Indian weights and measures mentioned in Section VII. shall receive any weights and measures that may be brought to them for examination, and shall examine them, and, if correct, shall impress on them a stamp and return them; a fee of six pies shall be levied for each weight or measure so stamped. It shall also be lawful for the said officers to keep, or cause to be kept, correct and duly stamped weights and measures for sale to any person at a price not exceeding their cost and the stamping fee.

PART II.

IX. From the first day of January 18 the provision of this second part shall take effect within the towns of Calcutta, Madras and Bombay, and in all towns containing an estimated population of not less than 5,000 persons to which the Local Government may extend it, and in all Railway Stations and Military Cantonments, and from and after the first day of January 18 throughout the whole of British India.

X. It shall not be lawful for any person to sell by retail, any of the articles specified in Schedule A by any weights and measures other than the Indian weights and measures prescribed by this Act.

XI. Any retail dealer who shall use, or have in his possession, any other weights and measures than Indian weights and measures, except under special licenses granted in accordance with Section XII. of this Act, shall be liable for a first offence to a fine not exceeding rupees ten for each weight and measure so had or used, and for a second and any subsequent offence to a fine not exceeding rupees fifty for each weight and measure so had or used; and all weights and measures that have formed the subject of conviction under this Section shall be destroyed.

XII. Any retail dealer who sells by retail any article other than those specified in Schedule A of this Act, for the retail sale of which a special scale of weights and measures is commonly used, may apply for a special license to have and use such weights and measures, for the articles other than those specified in Schedule A. Such application shall be made to any of the officers in charge of the standard Indian weights and measures mentioned in Section VII., and shall specify the number, names, and presumed weight, capacity or length of the weights and measures presented for

examination. The weights and measures shall be examined, and, if found correct, shall be returned with a license in the Form B, which shall be in force for a period not longer than five years. A fee of four annas shall be levied for each weight or measure stamped under this Section.

XIII. Any person who shall have received a license under the the last Section to have and use for certain articles special weights and measures, and shall use such special weights and measures, for the retail sale of any of the articles specified in Schedule A of this Act, shall be considered to have used such weights or measures fraudulently, and to have committed the offence described in Section 265 of the Indian Penal Code.

XIV. In towns and places where there are periodical bazaars, markets, or fairs, it shall be the duty of the Municipal Commissioners, or (if there are no Municipal Commissioners) of the Magistrate of the district, to make rules for the guidance of all persons attending such market or fair, with the object of ensuring the use of Indian weights and measures in the retail sale of all the articles included in Schedule A of this Act; and such rules, when approved by the Local Government, shall have the same force as any other orders issued by the Municipal Commissioners or Magistrate of the district.

XV. Indian weights and measures and no others shall be used at all Railway Stations by the servants of the Railway Company, and any Railway Company that shall have or use any weights and measures other than the Indian weights and measures shall be liable to a fine of rupees fifty for each weight or measure so had or used, and all such weights and measures or instruments used as such, shall be confiscated.

XVI. Every Police Officer, or other person when empowered by warrant from a Magistrate, or any two Municipal Commissioners, and every Police Officer in charge of a Station without warrant, may enter any shop or premises for the purpose of inspecting or searching for any weight or measure kept or used therein, whenever there is reason to believe that there are in such shop or premises any weights or measures kept or used in opposition to the provisions of this Act. Any such weights or measures may be seized, and information given to the nearest Magistrate.

XVII. All offences under this Act (except those described in Section XIII.) may be tried by any Magistrate under the provisions of the Code of Criminal Procedure.

SCHEDULE A.

Grains and seeds of all kinds when sold by weight or capacity.
Bread and Biscuit of all kinds.
Butcher's meat (beef or mutton).
Tobacco in leaf.
Salt.
Sugar.
Sweetmeats.
Brass and copper vessels when sold by weight.
Cloth when sold by length.
Ghee.
Oil.

SCHEDULE B.

Name of applicant and Residence.	Names of Weights or Measures specially licensed.	Equivalent in Indian weight and measure of each Weight or Measure specially licensed.	Purpose for which each Weight and Measure specially licensed is to be used.	Period for which this License is to run.

RESOLUTION.—As suggested by the Acting Chief Secretary, the Right Honorable the Governor in Council is pleased to direct that the several papers referred to be printed and circulated for an expression of opinion on the part of the Magistrates, public bodies, and persons interested in the question.

2. The reports should be submitted as soon as possible.

(Signed) H. E. JACOMB,
For Acting Chief Secretary to Government.

APPENDIX M.

RAILWAY PROGRESS.

No. 128 of 1867.

Bombay Chamber of Commerce,
3rd September 1867.

To Major General Harry Rivers,
Agent to the G. I. P. Railway Company, Bombay.

Sir,—I am directed by the Committee of Management of the Chamber of Commerce, to request that you will kindly furnish them with a statement of the progress of the Company's works with particulars of the probable date at which such portion as are far advanced will be opened.

As the Statement is required for their Annual Report which will be laid before the Annual Meeting of the Chamber on or about the 30th instant, it would be convenient for the Committee if the Statement could be furnished before that date.

I have the honour to be, &c.,
(Signed) James Taylor,
Secretary.

No. 6009 of 1867.

Great Indian Peninsula Railway Company's Offices,
Bombay, 30th September 1867.

To James Taylor, Esq.,
Secretary to the Chamber of Commerce.
Bombay.

Sir,—I have the honor to report for the information of the Chamber of Commerce, that comparing the line as it stood on the 30th of June 1866 with the same date in 1867, there were at the former date 701¼ miles open, and at the latter 852¼ miles including the completion to Nagpore—of these, 60 miles were at the former date double, at the latter, 102 miles.

As to the future I had up to the beginning of this month hoped to have been able to report the probable opening of the Main line to Etarsee—110 miles beyond the present terminus next

November, but the very heavy floods at the end of August have destroyed one and severely injured two other bridges on this side of Hurdah, so if opened at all to Hurdah it could only be by the adoption of several temporary works through the beds of the rivers.

Beyond Hurdah a great deal of the work is finished, and rails are laid at considerable lengths at various places all the way to Jubbulpore, but the opening of the line depends on the completion of four Viaducts, at one of these, the towa, there have been successive disasters, so that the design and work finally determined on was only commenced last February, and the Viaduct cannot therefore be completed before March 1869.

This date is the latest required for the completion of any work throughout the whole length to Jubbulpore.

It had almost been determined that by the introduction of temporary diversions through the beds of the rivers, Railway communication with Jubbulpore might have been established for next fair weather, but the late disasters, will now, I fear, put this out of the question.

On the South East Line the progress of work has been pretty good, from Sholapoor to Kulburga the earthwork and 40 per cent of the other work has been completed from Kulburga to the Madras Line Junction Station, all is well forward, but the Kistna Viaduct, the site and design of which has been changed, cannot be completed before the end of 1869.

In consequence of the short supply of rails from England, there will not be as much of the line between the Thull Ghaut and Bhosawul Junction doubled this season as I had expected, there will however be 50 miles, and additional crossing places will be put in on the remainder.

By aid of this as well as the additional rolling stock and a system of working the trains which will turn the stock more quickly, the Company will be quite prepared to carry the cotton of next season's crop.

I have the honor to be, &c.
(Signed) Harry Rivers,
Major General R. E., Agent

No. 129 of 1867.

Bombay Chamber of Commerce,
3rd September 1867.

To C. CURREY, Esq.,
Agent to the B. B. and C. I. Railway Company,
Bombay.

SIR,—I am directed by the Committee of Management of the Chamber of Commerce to request that you will kindly furnish them with a statement of the progress of any work of the Company that may be in course of execution, or any other information regarding the line that may possess interest for the public.

As any statement you may be able to give will be included in the Report to be laid before the Annual Meeting of the Chamber to be held on the 30th instant, and it would be convenient to the Committee to receive the same a few days before.

I have the honor to be, &c.,
(Signed) JAMES TAYLOR,
Secretary.

No. 4116 of 1867.

B. B. and C. I. Railway Agent's Office,
Bombay, 27th September 1867.

To JAMES TAYLOR, Esq.,
Secretary to the Chamber of Commerce, Bombay.

SIR,—In reply to your letter of the 3rd asking for some information as to the progress and operations of this Company to be included in the Annual Report of the Chamber of Commerce, I have the honor to state as follows :—

2. A complete survey of the projected extensions from Baroda or Wassud to Neemuch and thence to Delhi and Agra, has been authorized by the Secretary of State, and is now being carried out by the Engineers of this Company, the further investigation which has been made of the comparative merits of the two routes from Baroda on the South of the Myhi River, or from Wassud on the north of the Myhi river, has resulted in placing beyond doubt the superiority of the Wassud route.

3. The construction with capital guaranteed by Government of a short line of 2½ miles from the existing station at Ahmedabad to the North Western side of the Saburmattee river, including the erection of a large bridge over that river, has also been authorised by the Secretary of State, but a guarantee on the

capital of about 25 lakhs necessary for the important further extensions of 31 miles from the Saburmattee river to Veerumgaum has as yet been withheld. Renewed representations on this matter however are being made.

4. In Bombay, steps under the authority of Government were taken in the early part of this year for proceeding with so much of the reclamation in Back Bay as might be necessary for Railway purposes—the question of the Company's terminus in Bombay is under the consideration of Government.

5. During the monsoon of this year, a portion of the Railway embankment between the Nerbudda Viaduct and Unclesur was washed away owing to the heavy floods, the embankment has since been temporarily restored and the passage of trains resumed as usual over it—measures will be adopted for strengthening the embankment, and also for giving such additional waterway as may be required with the view of diminishing the risk of a recurrence in future of a similar interruption. It is satisfactory to be able to remark that the bridges which carry the railway across the large rivers, have all of them satisfactorily sustained the severe test to which they have been put by the extraordinary floods of this season.

I have the honour to be, &c.,
(Signed) C. Currey,
Agent.

APPENDIX N.

RIVISED TARIFF VALUATIONS.

No. A3 of 1866.

Bengal Club, Calcutta, 12th October 1866.

To the Secretary of the Chamber of Commerce, Bombay.

Sir,—I have the honor to state for the information of the Chamber of Commerce, that I arrived in the P. & O. Company's Steamer "Nubia" at Calcutta on the 10th instant, and that the Tariff Commission has been assembled, and that we are at once to enter upon our duties.

2. If the Chamber of Commerce have any further suggestions to offer in regard to the revision of the Tariff or any alterations or amendments to make regarding the Customs Laws, I request that you will favour me with their opinion, as the present would be a favourable opportunity for me to urge them upon the attention of the Government of India.

I have the honor to be, &c.

(Signed) A. F. Bellasis,

Commissioner of Customs Salt and Opium.

No. 10A of 1866.

Calcutta, 25th October 1866.

To the Secretary of the Chamber of Commerce, Bombay.

Sir,—At the last meeting of the Tariff Commission while discussing the classification of articles it was proposed to alter the numbering of Mule Twist.

Present Classification.				Proposed Classification.			
1	Mule	No.	16 to 24.	1	Mule	Nos.	to 10.
2	„	„	28 to 32.	2	„	„	to 20.
3	„	„	38 to 42.	3	„	„	to 30.
4	„	„	48 to 52.	4	„	„	to 40.
5	„	„	60	5	„	„	to 50.

2. I request that you will submit this point to the Chamber and oblige me with their opinion—if the Chamber is in favour of the proposed alteration, I request they will furnish me with their valuations of these five numbers of Mule Twist.

I have the honor to be, &c.,
(Signed) A. F. BELLASIS,
Commissioner of Customs, Bombay—on Special Duty.

No. 218 of 1866.
Bombay Chamber of Commerce,
24th October 1866.
Bombay.

To the Hon'ble A. J. HUNTER,

DEAR SIR,—I am directed by the Committee of Management of the Chamber of Commerce to forward for your information as President of the Tariff Committee the accompanying communication received from Mr. Bellasis, and to request you will be good enough to state whether the Tariff Committee have any further suggestions which they would wish to offer for the consideration of the Committee now assembled at Calcutta.

I remain, &c.,
(Signed) JAMES TAYLOR,
Secretary.

No. 227 of 1866.
Bombay Chamber of Commerce,
3rd November 1866.

To A. F. BELLASIS, Esq.,
Commissioner of Customs, Bombay—on Special Duty, Calcutta.

SIR,—I have the honor to acknowledge the receipt of your two letters of 12th and 25th ult. which have been duly submitted to the Committee of Management for their consideration.

In reply, and with reference to the point raised by the Tariff Commission in regard to the numbering of Mule Twist, I am directed to forward herewith copy of a Minute by the Hon'ble Mr. Hunter, Chairman of the Chamber on this subject which is approved by the members, and to request you will be so good as to lay the same before the Tariff Commission. The Committee trust these suggestions may have the approval of yourself and the other members of the commission.

There are no further suggestions on this or any other points in connexion with the revision of tariffs, which on the part of this Chamber it would be considered expedient to offer—but should it occur to yourself to make further reference at any time, I am instructed to say that your communications shall at all times receive prompt and careful consideration. With best wishes for the successful prosecution of the labours of the Committee.

I have the honor to be, &c.

(Signed) JAMES TAYLOR,
Secretary.

MINUTE BY HON'BLE A. J. HUNTER.

The suggestion to have a tariff value for No. 10 Mule Twist is a good one, as there has been a considerable quantity of this number imported of late, which owing to there being no fixed tariff value for it, has been charged duty at market price. I would suggest its being valued for levying duty at 6½ annas per lb. which is the same proportionate price to the rates quoted in my former minute for other numbers.

I do not think however it will suit to fix tariff rates as proposed by the Tariff Committee for even Nos. alone of Mule Twist—say 10's 20's 30's and so on, without including intermediate numbers, which are frequently imported, in particular Nos. 16 18 22 and 24's—I would suggest that values be fixed on the following arrangement.

No. 10 and under
12 to 20 inclusive.
22 to 30 „
32 to 40 „
42 to 50 „
and so on

APPENDIX O.

REVISION OF SYSTEM OF DRAWBACK ON RE-EXPORTS.

No. 965 of 1867.

Office of Commissioner of Customs, Salt and Opium,
Bombay, 9th May 1867.

To James Taylor, Esq.,
Secretary to the Chamber of Commerce, Bombay.

Sir,—I shall feel obliged by your obtaining and favouring me with the opinion of the Chamber of Commerce on the proposal contained in the annexed correspondence (to be returned) to abolish the present system of allowing Drawback on dutiable goods when re-exported within a fixed period.

I have the honour to be, &c.,
(Signed) A. D. Robertson,
Commissioner of Customs, Salt and Opium.

No. 68 of 1867.

Bombay Chamber of Commerce,
19th May 1867.

To A. D. Robertson, Esq.,
Commissioner of Customs, Salt and Opium,
Bombay.

Sir,—I am directed by the Committee of Management of the Chamber of Commerce to acknowledge the receipt of your letter of the 9th instant, forwarding copy of correspondence on the subject of the abolition of the present system of allowing drawback on dutiable goods when re-exported within a fixed period and requesting the opinion of the Chamber thereon.

In reply, I am to state, that the Committee strongly object to the abolition of the right to claim drawback within a fixed period in the present state of affairs connected with the trade of the port.

The reasons given in para. 8 of Mr. Bellasis letter for the abolition of the right to claim drawback, are in the opinion of the Committee erroneous, and are based on a misapprehension of the Custom of trade in reference to the particular class of goods specified.

When such goods pass from one hand to another, the right of drawback is always considered and the prices paid are affected accordingly.

Bombay is not yet in possession of such "excellent and commodious Bonded Warehouses," as would enable importer in all cases to place goods in Bond without having to pay import duty, and a suitable system of Bonded Warehousing cannot be introduced for sometime.

It does not appear to the Committee that this is a specially convenient season for raising the question, or that any inconvenience can arise from its being postponed. At the same time as the question has been mooted, and the Commissioner of Customs proposes reporting on the matter to Government.

The Chamber would be prepared to discuss any well considered scheme proposed in the modification of the present system.

I have the honor to be, &c.,

(Signed) JAMES TAYLOR,
Secretary.

P. S.—The correspondence is herewith returned in compliance with your request.

APPENDIX P.

MAIL EXPRESS TO CALCUTTA.

No. 1331 of 1867.
Dated Camp Poona, 10th August 1867.

To the Secretary Chamber of Commerce, Bombay.

Sir,—I beg to invite attention to Dr. Impey's letter No. 1875 of the 20th April last, asking the opinion of the Chamber of Commerce as to the advantages likely to accrue to the public by the utilization, for prepaid ordinary letters with an extra fee of 4 annas, if the special train provided on the arrival of each P. and O. vessel for the speedy disposal of Overland Correspondence.

2. The Post Master Bombay, is of opinion, that a large number of Merchants would gladly seize this opportunity for communicating to their Calcutta constituents news of importance received by the Overland Mail.

3. An early reply is solicited.

I have the honor to be, &c.,
(Signed) Fred. R. Hogg,
Officiating Post Master General.

No. 115 of 1867.
Bombay Chamber of Commerce,
15th August 1867.

To F. R. Hogg, Esq.,
Officiating Post Master General, Bombay.

Sir,—I have to acknowledge the receipt of your letter of the 10th instant, and in reference to Dr. Impey's letter of 20th April last on the subject of sending prepaid letters by the special or express train that is despatched to Calcutta on the arrival of each Overland Mail in Bombay.

In reply, I have the honour by direction of the Committee to inform you, that the members of the Chamber have been consulted on the matter, there is a general concurrence of opinion, amongst

them that the proposed express would be a public advantage, and the members of the Chamber would be glad to see it carried out according to the arrangement proposed in Dr. Impey's letter.

The merchants here connected with Burmah, look upon the proposal as likely to be a great convenience to them in their correspondence with that country, as by the aid of the Express they may expect their letters to go forward *via* Calcutta without losing at any time the Rangoon steamer.

I have the honor to be, &c.,
(Signed) JAMES TAYLOR,
Secretary.

APPENDIX Q.

THE INDO-EUROPEAN AND INDIAN TELEGRAPHS.

No. 231 of 1866.

Indo-European Telegraph Department,
Bombay Castle, 5th September 1866.

To the Secretary to the Chamber of Commerce, Bombay.

Sir,—Referring to Mr. Under Secretary King's letter to your address from the General Department No. 1569 dated 11th August last, on the subject of the conveyance of Messages to and from India via Diarbekur and Alexandria, I am directed to transmit for the information of the Chamber of Commerce the accompanying copy of a letter from the Director of Mekran Coast and Sub-marine Telegraph No. 919 dated 28th August with enclosure.

I have the honor to be, &c.
(Signed) A. R. Hoskins, Captain R. A.,
Acting Deputy Secretary to Government.

No. 919 of 1866.

Indo-European Telegraph Department,
Kurrachee, 28th August 1866.

To the Secretary to Government, Bombay.

Sir,—I have the honor to submit for the notice of Government, that some short time ago a notice was published in the Indian newspapers signed by the Agent of the Malta and Alexandria Telegraph Cable Company, informing the public that messages could be conveyed to and from India via Diarbekur and Alexandria, and with a view to correct any misapprehension that may exist as to the advisability of sending messages by that route, I beg to forward an extract from a letter dated Constantinople 11th July 1866 from the Telegraph Commissioner at that Station to the Traffic Manager here. Until the alternative line

via Alexandria is declared by the Ottoman Government to be open for the transmission of the international messages, this department is compelled to decline forwarding them under any circumstances.

I have the honor to be, &c.,
(Signed) H. J. WALTON,
Director Mekran Coast and Sub-marine Telegraph.

"*Alexandria Route.*—The Turks decline to take messages for England via Alexandria. Their arrangments via Ghaza are only such as will admit of the Turko-Egyptian local traffic only. They have made all their arrangements for the Anglo-Indian traffic via Constantinople and Valona or Belgrade. Were they to admit such traffic via Egypt, they would have to send a much larger staff down to Ghaza and probably would send some of their staff occupied on their present line, a step which would certainly be opposed by us. Furthermore there is nothing to be gained by it. If by sending via Alexandria, the messages need not pass through the Italian States, at present the scene of war one could understand it, but as far as Otranto they come the same route as those via Valona and Constantinople which is working very well. The Turkish lines are working well from one frontier to the other, and there is no reason whatever for any other route to be chosen."

(True Extract.)
(Signed) H. J. WALTON,
Director Mekran Coast and Sub-marine Telegraph.

No. 282 of 1866.

Indo-European Telegraph Department,
Bombay Castle, 19th October 1866.

To the Secretary to the Chamber of Commerce, Bombay.

SIR,—Referring to your letter No. 70 dated 7th March last, I am directed to acquaint you for the information of the Chamber of Commerce, that the Secretary of State in referring to the suggestion made in the last para. of your letter above quoted, has intimated to this Government (in Despatch No. 20 dated 14th September last) that the appointment of an agent of Government in London to receive and forward messages to India, by

whichever Continental route might be known at the time to be in the best working order, would involve an interference on the part of Government in a branch of business obviously belonging to private enterprise.

I have the honor to be, &c.,
(Signed) A. R. HOSKINS, Captain R. A.
Acting Deputy Secretary to Government.

No. 524.

" General Branch.

Calcutta, 22nd April 1867.

To the Secretary Chamber of Commerce, Bombay.

SIR,—I have the honor to forward in original a letter dated the 2nd instant, signed apparently by a number of Native Firms in Bombay, complaining that an improper use is made by the Press of the privilege accorded to it of having its telegrams delivered at whatever hour of the night they may arrive, instead of retaining in the Telegraph Office such as come to hand between 8 P.M. and 6 A.M. of the following morning, as is the practice with ordinary messages.

2. This rule was made because of the difficulty and in fact almost impossibility of finding the addressees of messages after they had left their places of business, and also because if the annoyance that would frequently be occasioned by disturbing people in the middle of the night to receive messages, on which in 9 cases out of 10, no action could be taken till the following morning. Messages for the Press can however be conveniently delivered at any hour of the night, and as such messages contain news that is published for general information, the public would be the sufferers if this Department detained those arriving during the night and thereby prevented their appearance in the following morning's issue of the newspapers Press.

3. Press-messages get no privilege whatever on the line, and none of any description over ordinary messages beyond what I have stated, except in the case of those containing European intelligence prepared by Reuter's agent, and these the newspapers are bound at once to publish. In order to reduce the great expense of these messages, permission has been accorded to allow of their transmission partly in cypher, but a key to the cypher has been supplied to this Department by which we can at once see that the true translation of every such message is correctly published.

4. I am not aware whether the writers of my enclosure are small petty traders or belong to influential Native Firms. I have therefore thought it desirable to place the letter before the Chamber and to solicit an opinion as to whether or not there is reason to believe that any foundation exist for the accusation made.

I have the honor to be, &c.,
(Signed) T. G GLOVER, Lieut.-Col. R. E.,
Officiating Director General of Telegraphs in India.

Bombay, 2nd April 1867.

To the Superintendent of Electric Telegraph Complaint Office,
Calcutta.

HONORED SIR,—With feelings of deep regret and surprise we find that since a month you have sent instruction to give preference to Press-messages for day and night, while we get our messages only during the day, and the Press-message are forwarded from the office at any hour of the day and night. These messages are really the properties of some of the speculators, who, in order to have preference over other honest speculators, make arrangement with the manager of the Presses to give them a certain moity and they allow them to use their names we think. Now we believe some of the speculators are in negotiation with the English Presses, and they will be also successful in getting their messages first. All these Press-messages receive preference from the office, so they actually benefit the speculators while the other speculators who have no such arrangements are left entirely to the mercy of these parties who by the light and force of their first messages plunder the poor and innocent trader in the market.

In the year 1863 to 1864 such preference was given to the Press-message, but, when the complaint was made to your office, the Superintendent seeing the injustice done to the merchants by such arrangement, at once discontinued giving preference to the Press-messages, we refer you to your own records of these years for your satisfaction. We assure you that the continuance of such arrangements is really unjust and unreasonable. We therefore solicit your kind due consideration to this important subject, and we ask justice done to our cause. This arrangement of giving preference to press-messages should be at once put a stop without least possible delay by wire, (and we are ready and willing to pay

you the cost), we have at present no alternative but to apply to you. Trusting you will be the proper person to remedy ourgrievance.

(Signed) HEERJEEBHOY FRAMJEE,
FRAMJEE & Co.,
PURUSRAM RAMJEEDASS,
VEERCHUND JAVAIR & OTHERS.

N.B.—Pray consider what advantages the Press derive by spending large amount say Rs. 600 to 700 per month. It is not for the benefit of their readers but to benefit some of the speculators who, we are of opinion, defray this heavy message expenses. This circumstance could be easily found out from their own books.

No. 70 of 1867.

Bombay Chamber of Commerce,
27th May 1867.

To COLONEL GLOVER,
Officiating Director General of Telegraphs in India, Calcutta.

SIR,—I am directed by the Committee of Management of the Chamber of Commerce to acknowledge the receipt of your letter No. 524 dated 22nd ultimo, forwarding in original a letter to your address from certain native firms in Bombay, complaining that an improper use is made by the press of the privilege accorded to it of having its telegrams delivered at whatever hour of the night they may arrive, instead of retaining in the Telegraph such as come to hand between 8 P.M. and 6 A.M. the following morning—and requesting the opinion of the Chamber as to the justice or otherwise of the accusation made.

In reply I am instructed to inform you, that the names of the persons adhibited to the letter to your address are not those of influential native merchants here, and they are altogether unknown to the Chamber. The Committee have made special enquiries on the subject of the native traders' letter, and the result is, they are of opinion, that there are no grounds whatever for the allegations made therein. The newspapers here receive no telegrams except those supplied through Reuter's agency which are common to the other Indian Newspapers, and indeed to any one who chooses to subscribe to them. The letter from the native traders is herewith returned.

I have the honor to be, &c.,
(Signed) JAMES TAYLOR,
Secretary.

APPENDIX R.

ADDRESS TO SIR H. B. E. FRERE.

The address to Sir Bartle Frere on the occasion of his retirement from the office of Governor of Bombay which was voted by acclamation at a Special General Meeting of the members of the Chamber held on Saturday the 9th February 1867, was, by appointment, presented at Parell on the afternoon of Monday the 25th idem. The Chairman the Hon'ble A. J. Hunter,—who was accompanied by the Secretary and a large number of the members of the Chamber,—read the address, which was as follows :—

To His Excellency
Sir Henry Bartle Edward Frere, G.C.S.I., K.C.B.,
Governor of Bombay.

Honorable Sir,—On the occasion of your retirement from the office of Governor of Bombay, we, the Members of the Bombay Chamber of Commerce, desire respectfully to approach your Excellency to express the sense we entertain of the services you have rendered to the interests of commerce in Western India, by the liberal policy which has characterized your Excellency's administration during your five years' rule.

We remember with gratitude the aid which, as Commissioner in Sind, you rendered to the infant trade of that province, by the encouragement and facilities afforded to the early mercantile settlers at Kurrachee, and by the zeal and energy with which you devoted yourself to the development of the resources of the country, and the improvement of the means of intercommunication between the Port of Kurrachee and the interior.

One of the early acts of your Excellency, on assuming the office of Governor of Bombay, was to take steps, in so far as the matter lay within the province of your Government, to promote the improvement of the cotton cultivation in this Presidency at a time

when the failure of the cotton supply from America, owing to the civil war in the United States, had brought distress and privation on a large portion of the manufacturing population in England. The efforts then made have been steadily continued, and the numerous and valuable experiments that have since been carried on have already resulted in a remarkable improvement in the cotton cultivation in various districts of the Presidency.

To your Excellency's Government we are indebted for the measures that have been taken for the improvement of the Harbour and for the accommodation of the Shipping.

The Harbour and Pilotage Board was, four years ago, re-formed on a wider basis, which has given to its action greater scope and efficiency; and the Pilotage system of the Harbour has recently been reconstructed on a plan which is a great improvement on that which has been superseded, and will, we trust, shortly result in a system of free and open Pilotage. The new Light-house on the Island of Kennery that has been sanctioned by your Excellency's Government will, when completed, be an important boon to the Shipping of Bombay; and the important work of lighting all the ports and creeks on our coast, already begun, we trust to see steadily prosecuted and completed.

Railway communication in Western and Central India has made remarkable progress during the period of your Excellency's administration, and the people of Western India are under obligations to your Excellency for the zeal, energy, and ability with which you have pressed on the Governments of India and England the necessity for Railways to connect Bombay with Delhi and Northern India through Rajpootana, and Kurrachee with the Punjaub by the Indus Valley. The proposed lines are absolutely indispensable to develop trade already existing, and to create it in some important districts of Northern India with which Bombay has at present no trading relations.

We desire to express our grateful appreciation of the consideration and attention which your Excellency's Government has at all times given to the representation of the Chamber, when, as a public body, we have had occasion to address Government on questions of mercantile or public interest, and of the honor you have done us in inviting opinions and suggestions from the Chamber on questions of importance that have been submitted to us by your Government.

In retiring from the high office you have filled with so much honor to yourself and advantage to the interests of Western India, you carry with you our best wishes for your future happiness and

prosperity; and we earnestly trust that your Excellency may long be spared to continue to serve India in the high office to which Her Majesty has called you.

For the Members of the Bombay Chamber of Commerce,

A. J. HUNTER,
Chairman.

Bombay, 9th February 1867.

THE REPLY.

The address having been read, His Excellency replied to the following effect:—

Mr. Hunter, and Gentlemen of the Chamber of Commerce,—I have received the address which the Chamber has been good enough to vote to me, with peculiar pleasure, as a proof that I shall carry with me on leaving India the goodwill of that great commercial body which you represent. The Government of India, and especially of this part of India, is so intimately connected with commercial interests that a good administration can hardly be imagined without a general good understanding between the Government and the commercial interests. To foster the improvement of roads or the opening of new ports and harbours is a comparatively easy task; it is a task congenial to every educated Englishman; and the work in itself carries with it in every respect its own reward. But the best relations which can subsist between an absolute Government like that of India and a free commercial body like your own, trained in the congenial air of English liberty and imbued with the truths of our free English commercial policy,—these are problems of greater delicacy and difficulty, and I am glad to have your assurance that I have done some good service in solving them. To some of these problems your address alludes as of great importance to trade and agriculture. First, there is the great question of cotton improvement—improvement of the staple and quality, by means of better seed and better cultivation, and more careful methods of picking—improvement of the quantity of produce by irrigation, and better culture, and by the use of machinery to clean the cotton rapidly and effectually. In all these respects Government has done something, and may, and I hope will, do much more, without trenching on the legitimate province of commerce. But in all we have done in these matters—and I trust in all that will hereafter be attempted—it has been our wish to consider what Government does as purely ancillary; and when the great body of the cotton traders themselves find they

can do without such help as we can give, or when well-organized societies—like the Cotton Supply Association, which has done such good service, or agricultural associations which might do so much more—are ready to take up any branch of the work, then I trust Government will at once transfer the work to such competent hands. But there is a branch of Government's peculiar duty which can never be entirely superseded—and which I believe does and can do more than anything else to improve both the quality and the quantity of your great staple—and that is the improvement of communications, quiet apart from the facilities which would be thereby afforded for the transport of produce. Railways, and roads and accommodation for travellers might be extended, so as to bring the native cotton grower and the English cotton buyer face to face, and thus emancipate us from a thraldom ignominious indeed, but from which there is now no escape. I verily believe that few, even of the most sanguine of us, have a full conception of the vast results which are likely to be produced in the cotton and all other great branches of our trade as our means of communicating with the interior of this great continent improve and extend. I used to think that India had but a poor chance of fairly competing with other countries as the great supplier of raw cotton, save under the exceptional circumstances of the past few years; but I own that the experience of the past year or two has made me much more hopeful. I have seen provinces like the Punjaub and Rajpootana, which five years ago were entered in our best and latest cotton maps as producing no cotton for export, contribute largely under the stimulus of high prices. It is true we cannot hope to discover vast wastes capable of immediate conversion into productive cotton fields; there are, no such great reservoirs of raw material; but there are, I believe, a thousand rills hitherto of comparatively small moment, which when united as they may be, by continued peace and improved communications, will tend to swell the great stream of your existing supply. Another question in which the duties of Government and of the commercial body are conterminous, is that of checking the adulteration of the staple. I will not enter on the vexed arguments for and against Government interference in this matter. I will only remind you that Government would only desire to act as far as the most enlightened commercial opinion may show to be necessary, and to do simply what the honest dealer in cotton finds desirable for his own protection. I had lately an opportunity of saying a few words on another very important subject, in which I am glad to think you believe I have done some service—the im-

provement and conservancy of the harbour, its pilotage and lighting, which are all matters of primary importance to the trade of this port. We have entrusted them to a Harbour Board, from a conviction that they will be better attended to by such a body than by a department of the Government Secretariat. Our wish was to make the Board as far as possible a body which shall truly and effectually represent all the great interests concerned, and I believe the Board may draw to itself almost any amount of independent authority, by efficiently discharging the duties entrusted to it, and by guarding itself against even unintentional transgression beyond the limit of its legitimate functions. I trust at no distant day that the Board may receive by legislation a permanent corporate constitution; but the practice, extent, and value of its powers will always depend more on the way in which these powers are exercised than on their exact legal extent. I am glad to have this opportunity of informing the Chamber that the discussion, which has been conducted with so much ability on the subject of graving docks has not been unfruitful of result. By last steamer we received from the Secretary of State a despatch informing us that he was fully convinced of the necessity for immediate action in the matter, and that he only awaited a decision on a scientific question—which he had referred to competent judges—before taking action to supply at once the means of docking the large transports which a year hence will, I hope, be running between this and Suez. I trust that we are not far from equally satisfactory progress as regards the question of wet docks; and I am glad to be able to correct a misapprehension as to the extent to which I would leave the provision of wet docks to private enterprises. Whatever they should or should not be provided in supersession of the present means of loading or unloading ships is, I think, a purely commercial question—even more so than the provision of Railways or of lines of steam packets and the docks should, I think, be provided, as railways or steam packets are, from commercial capital. But the interests involved are extensive, and the dangers of monopoly sufficiently great to justify at least as much Government aid or interference as we find to be useful or desirable, in the case of Railways. The management should, I think, be by a public trust in which Government should be associated. The subject has, I know, engaged Colonel Strachey's attention; and I am not without hope that we may shortly receive from him the outlines of a plan which would adequately protect every private interest at stake, and gradually provide such dock accommodation as is called for, not in one locality only, but in three or more as may

be needed, between Colaba and Mazagon. I must not be tempted to discuss at length—much as I should wish to do so—many other topics you have referred to in your address, especially what you say regarding railways. I am convinced that our railway system is only in its infancy, and that the results which now surprise us foreshadow but imperfectly what will attend its future development; and I trust that the guarantee system, to which we already owe so much may do yet more for us than the marvels it has hitherto accomplished. The address of the Chamber has alluded to the attention which the Government of Bombay has always accorded to the representations of the Chamber as a public body. It has not been difficult, Sir, for the Government to maintain such an attitude towards the Chamber when the proceedings of the Chamber have been habitually marked, not only by so much sound and varied information, but by so much judgment and such a temperate regard for what was due to Government. I have always felt a peculiar pleasure in watching the proceedings of the Chamber, and in marking the growth of the influence it has acquired; for in my earlier days, Mr. John Skinner—who was, I believe, the first Chairman of the Chamber, and who might be considered the founder of that and of more than one useful institution which still exists in Bombay—was a valued and intimate friend of mine, and I have often thought how much he would have rejoiced to see the Chamber more than fulfilling the high expectations he had formed of it. And here, Sir, let me take the last opportunity I may have of expressing my sense of the great obligations this Government is under to those of your body who have rendered our Government such essential aid as members of the Governor's Council for making Laws and Regulations. I am well aware that opinions are divided as to the value of our legislative machinery and this is not the time nor the place for discussing that question; but I may be allowed to state my own opinion, that there is not one of the great measures which have been devised of late years for the better administration of the country which is of great importance or likely to produce more valuable results, than the association of gentlemen independent of the Government in the machinery for making such laws as may be needed. It is not only while discussing questions in the Legislative Chamber that their aid is most valuable: even when out of the Council Chamber they are frequently able to throw upon questions before us a light which we should in vain seek in our public offices and official records. I am the more anxious to pay this tribute which I feel to be due to yourself and the other independent gentle-

men who have been associated with me, because I know their aid has often been rendered to us at a great personal sacrifice of convenience and of time, which, especially to professional men, is frequently of exceeding value. Of the public service thus rendered I would beg to express to you, Sir, and to your fellow members of my Council, my grateful sense; and I will only further beg you to convey to the Chamber of Commerce my cordial thanks for the address you have read.

APPENDIX S.

MISCELLANEOUS.

ADEN TRADE REPORT 1866-67.

No. 2437 of 1867.

Political Department, dated 30th July 1867.

To the Secretary to the Chamber of Commerce,

Bombay.

Sir,—I am directed to forward to you for the information of the Chamber of Commerce, the accompanying extract paras 8 to 12 from the administration report of Aden for the year 1866-67.

I have the honour to be, &c.

(Signed) C. Gonne,

Secretary to Government.

EXTRACT PARAS: 8 *to* 12 *from a letter from the Resident at Aden dated the* 15*th June No.* 407-78 *of* 1867.

Revenue Customs.

8. The following shows the external trade of Aden contrasted with that of the previous year.

Classification of Goods.	Imports.			Exports.		
	Value.	Increase.	Decrease.	Value.	Increase.	Decrease.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Apparel	16,820	...	507	8,967	2,782	...
Coal	21,68,730	...	3,54,584	...	...	...
Coffee	3,61,609	2,46,352	...	6,40,322	1,38,582	...
Cotton	1,02,336	15,338	...	47,044	23,354	...
Do. Piece Goods	24,35,623	3,53,445	...	21,70,071	6,21,586	...
Drugs	22,612	10,923	...	40,149	35,951	...
Dyes	8,308	...	3,024	33,701	8,528	...
Feathers	31,859	5,126	...	44,513	...	23,017
Fishmaws	...	...	...	250	250	...
Fruits	69,249	...	57,419	23,696	...	27,991
Grains	2,62,690	...	4,23,446	1,14,762	...	1,09,882
Gums and Resins	1,06,101	63,292	...	1,40,935	...	4,163
Hides and Skins	91,752	48,305	...	69,574	...	17,916
Ivory	1,46,985	...	64,007	1,51,083	2,711	...
Live Stocks	2,52,683	37,300	...	32,883	...	16,145
Malt liquor	6,552	...	8,770	...	...	84
Mats, &c.	6,752	3,442	...	786	...	400
Metals	49,083	...	2,235	36,821	13,743	...
Manufactured Metals	9,715	...	2,829	922	747	...
Mother o'Pearl Shells	...	...	270	115	100	...
Oils	20,237	2	...	8,072	...	2,235
Oilman Stores	6,962	3,646	...	1,068	1,008	...
Paints and Colors	839	...	2,615	134	...	956
Pearls	1,55,500	...	49,425	1,23,325	...	13,200
Provisions	99,586	12,171	...	39,098	...	52,982
Seeds	50,849	...	4,800	8,802	...	3,363
Silk	5,900	5,870	...	18,245	17,195	...
Do. Piece Goods	48,592	18,631	...	34,554	24,174	...
Spices	13,459	...	40,920	52,826	32,034	...
Spirits	21,819	3,905	...	3,066	2,373	...
Sugar	37,348	...	98,221	44,083	...	29,530
Tea	2,626	...	375	145	145	...
Tobacco	3,42,146	...	2,217	1,42,298	9,264	...
Tortoiseshells	4,332	4,282	...	1,446	240	...
Wax	20	...	80	5,351	...	6,425
Wines	22,872	9,002	...	400	300	...
Woods	...	...	...	...	...	...
Sundries	1,57,501	...	35,000	94,367	3,780	...
Total Merchandize	71,39,706	8,41,122	11,50,762	41,04,876	9,38,862	3,08,289
Do. Treasure	15,57,603	...	5,50,302	14,69,747	...	3,00,947
Grand Total	86,97,309	8,41,122	17,01,064	55,74,623	9,38,862	6,75,236

9. As compared with the returns of the previous year, there would appear to be a decrease in Imports and Exports of Rupees 11,48,947, but then this statement is only for eleven months, and

if monthly comparison is made, it will be found that there was an average increase of Rupees 51,811, or Rupees 6,21,732 for the year. This is not so favourable a display as in 1865-66, when there was shown a clear increase over the previous year of more than 37½ lakhs, but there are particular reasons for this which will be shown presently and the improvement we have may be reckoned a fair index of the steady extension of the trade of this port.

10. The very large increase last year was due to an unusual quantity of coal being imported by the Steam Companies having their depots here, and to large introduction of grain from India to meet a famine which unfortunately existed. Again the Imports and Exports in 1865-66 were rated against a year 1864-65, when the transactions in piece goods especially were very dull.

11. The decrease this year has been chiefly in coals 3½ lakhs and grain nearly 6 lakhs. These are the items—affected by chance circumstances less grain also was imported than usual owing to the Foodlee tribe being debarred entry into Aden, while the increase has been in those of real importance as showing the interchange of valuable and useful products; for instance, coffee about 4 lakhs, cotton ½ a lakh, cotton piece goods 9½ lakhs, silk piece-goods ½ a lakh, upwards of 6 lakhs of cotton piece goods were exported from this to Africa and Araba.

12. The trade with Abyssinia was much affected by the disturbances in that country; and with Bulhar, on the African coast, from Cholera and small-pox raging in that new settlement during the greater part of the season when kafalahs ought to have come there from the interior, but feared to do so. These diseases luckily disappeared soon after the beginning of 1867.

ZANZIBAR TRADE REPORT 1866.

No. 3299 of 1866.

Political Department, dated 5th November 1866.

To the Secretary of the Chamber of Commerce, Bombay.

Sir,—I am directed to forward for the information of the Chamber of Commerce, the enclosed printed copy of the administration report of the acting Political Agent at Zanzibar, for the year ending the 30th April 1866.

I have the honor to be, &c.

(Signed) C. Gonne,
Secretary to Government.

No. $\frac{65}{21}$ of 1866.

To the Chief Secretary to Government,

Political Department, dated Zanzibar, 186 .

Sir,—I have the honour to submit for the information of the Honorable the Governor in Council so much of the administration report for the year ending 30th April 1866 as relates to the commerce of the port of Zanzibar, the period under review, being as usual that between the 23rd and 24th August, the year of the Naoroz 1864-65.

I have the honour to be, &c.,

(Signed) G. Edwin Seward,

Acting Political Agent.

Report on the Commerce of Zanzibar during the year of the Naoroz 1864-65 by Dr. G. E. Seward, acting Political Agent.

1. The thriving standard of Zanzibar commerce which Colonel Rigby gave to the public has never since been equalled. The trade total of the year 1859-60, in which he established its importance, fell not far short of a million and three-quarters sterling (£1,673,178.)

2. Of the following year's commerce (1860-61) there is no record; but when next in 1861-62, its figure was determined, it had sunk to £801,424. In 1862-63 it had risen to a million, and in 1863-64 to nearly four hundred thousand more (£1,367,886.) But the increase of this latter year was due not so much to an expansion of commerce, as to the fortuitous suspension of an internal African feud, that for three preceding years had blocked up one of the main avenues from the Ivory marts of Lake Tanganika and the Eastern Littoral.

3. As to the year under review, its trade total has risen £18,837 above the average, and fallen £133,658 below that of the year before.

General Trade.	1859-60.	1861-62.	1862-63.	1863-64.	Average	1864-65.	1864-65 Trade compared with Average.	1864-65 Trade compared with 1863-64.
	£	£	£	£	£	£	£	£
Home ...	684,574	286,053	388,169	592,757	488,038	478,922	9,116 below.	113,835 below.
Foreign..	988,604	514,771	630,938	775,139	727,363	755,316	27,953 above	19,825 below.
Total...	1,673,178	801,424	1,019,107	1,367,896	1,215,401	1,234,238	18,837 increase	135,658 decrease.

4. The Foreign trade shows an increase both in Exports and Imports over the average, and an increase also over the Imports of last year. The Exports, however, as compared with the last year, are less by £88,466.

Foreign Trade.

Annual Foreign Commerce.	1859-60.	1861-62.	1862-63.	1863-64.	Average	1864-65.	1864-65 Trade compared with Average and 1863-64.	
	£	£	£	£	£	£	£	£
Imports..	525,533	245,978	332,092	294,615	349,563	363,256	13,694 increase.	68,641 increase
Exports..	463,041	269,793	298,846	480,526	377,801	392,060	14,259 increase.	88,466 decrease.
Trade Total, Foreign.	988,604	514,771	630,938	775,141	727,363	755,316	27,953 Increase total over average.	19,825 decrease total Foreign Trade.

5. The home trade exhibits Exports below either standard of comparison, Imports above the average below the preceding.

Home Trade.

Annual Home Trade Totals.	1859-60.	1861-62.	1862-63.	1863-64.	Average	1864-65.	Comparison of 1864-65 Trade with Average.	Comparison of 1864-65 Trade with that of 1863-64.
Imports	393,963	127,430	218,964	328,143	267,200	281,378	14,178 above	47,065 below.
Exports.	290,611	159,223	169,205	264,614	220,838	197,541	22,294 below	66,770 below
£	684,574	286,053	388,169	592,757	488,038	478,922	£9,116 below average	£113,835 below 1863-4.

6. The Imports stand as follows :—

Imports—Foreign Trade £13,694 above the average.
„ Home Trade £14,178 do. do.

Imports—Foreign Trade £68,641 above last year.
„ Home Trade £47,065 below do.

and are £27,872 above the average, and £21,576 above the previous year.

7. The Exports are—

Exports—Foreign Trade £14,259 above average.
„ Home Trade £22,294 below do.
„ Foreign Trade £88,466 below last year.
„ Home Trade £66,770 do. do.

and exhibit a decrease of £8,035 from the average, and £155,236 from the standard of 1863-64.

8. It may be of interest to notice some of the more obvious causes which have brought about this decline, more particularly as affecting the exports.

9. The population of the port and suburbs is said to have increased one-fourth within the last three years, and I believe the estimate to be a modest one. But, as there has been no corresponding addition to the purely agricultural class, produce has not kept pace with consumption.

10. Capital, which as bullion or produce would have swelled the reflux to British* India, has found a full employ at attractive rates of interest, and the operations of a British firm have not been without their influence on this arrest. Large sums have been invested in the purchase of estates, the erection of factories, and in the organization and maintenance of bodies of labourers for sugar culture.

* Western India.

11. The fever of speculation in Bombay found victims to its contagion in Zanzibar. Two hundred and fifty Bhattias (there were but double that number in the Zanzibar dominions) left this port for India, carrying with them all their accumulated gains, and the treasure that would have freighted a fleet was lost to Zanzibar, and its owners. A visitation of cholera during the year brought death to some 10,500 of the inhabitants of the ports between Mombassa and Brava, carried off the consumers, and diminished the exports.

12. Consignments of machinery, building materials, the general plant of oil and sugar factories, which have swelled the imports, have not as yet been brought to bear upon the production of these articles for export.

13. Where a trade value is mainly dependent upon the appearance of a few grand staples in the market, the abundance or scarcity of any one of these will naturally have its reflex on the trade total. This was the case in 1863-64 (if not also in 1862-63) when transport from the interior was again made possible by the politic distribution by His Highness Syud Majid of ten thousand German crowns amongst the Negro Chiefs of Uzegura, whose disputes respecting the right to levy black mail on the ivory merchants traversing their territories ended in a complete blockade of the most important route from the ivory districts of the interior to the coast. This stoppage had lasted some three years, during which, however, the Arab dealers dwelling in Unyanyembe and the ivory marts in the vicinity of Lake Tanganika had been by no means idle.

14. The road again open, the accumulated tusks were heaped up in the Zanzibar market. But the ill-satisfied demand for ivory had given an upward impetus to prices, and we find that in 1863-64, the value of the ivory exports was £52,183 in excess of the import figure of the same year.

15. This explanation will serve to equalise the disparity between the ivory commerce of the present and past years, and show the decline to be dependent simply on its return to the ordinary trade level after the casual influx of 1863-64.

16. The falling off in the ivory trade alone will account for £92,876 of the present year's decrease, and for £65,622 of the decline in exports.

17. The trade in cotton, cloth, or piece goods has risen £17,318 above the average, but fallen £34,045 below last year's value, but whilst the cotton exchange has suffered, the export of beads and wire, the alternative mediums of barter, has relatively increased,—that of beads largely so.

18. The export of cotton fabrics to Africa has fallen £3,270 below the average, and £44,608 below the value of last year's outgoing; and the import of gum copal, another main prop of the Zanzibar commerce has been affected, and, in this way, cotton

fabrics have been dear, copal of little comparative value and in no demand, seeing that its grand solvent turpentine has been scarcely procurable.

19. The copal diggers have refused to exchange their produce, the collection of which seasons of drought had made unusually difficult for the scrap of domestics that the coast Banians could afford to offer.

20. The cocoanut which, shelled and dried, is one of the chief articles of export to France, is more and more cultivated in Zanzibar, and is said to be fast displacing the clove.

Cocoanut Yields.

Year.	Island of Pemba.	Island of Zanzibar	Total.	Remarks.
	£	£	£	The first four annual yields are given on an estimate of the general local consumption and the relation of the Export values to the yields.
1859-60..	6,311	37,873	44,184	
1860-61..	..	..	...	*N. B.*—The Pemba yield only has been taken into account in calculating the value of the Home Trade Imports.
1861-62..	8,417	54,708	63,125	
1862-63..	12,625	77,724	90,349	
1863-64..	14,729	101,001	115,730	
1864-65..	18,937	107,313	126,250	

21. This produce has increased therefore, but as the demand has more than kept pace with the yield, a rise of from dlrs. 2 to dlrs. 4 per thousand has taken place, and although the yield has become more abundant, the exports have not unaccountably diminished; more oil is needed for an increased population, more nuts as food. The class of hamals, peons, and artisans are said to consume on an average each two nuts per diem.

22. A British firm has erected a steam oil-mill; oil is expressed on the spot, and the quantity available for export diminished.

23. Sesamum, or oil-seed, grown at and imported almost wholly from Lamoo, has in latter reports been unhappily clubbed with oil exports, and imports have risen above the average, but have fallen below the values of last year.

Clove Yield.

Years.	Pemba Island.	Zanzibar Island.	Total.	Remarks.
	£	£	£	*N. B.*—The Pemba Island crop only has been taken into account in calculating the "Home Trade" *Import* values.
1859-60...	4,208	42,084	46,292	
1860-61...	...	..	..	The first three years' yields have been given on an estimate of the known proportion of export to import values.
1861-62...	3,157	35,770	38,927	
1862-63...	8,417	52,604	61,021	1860 = 17½ per cent. 1861-62 = 10 „ „ 1862-63 = 14 „ „ 1863-64 = 19 „ „ 1864-65 = 25 „ „ — Average varying values of export over Import during years noted.
1863-64...	4,208	30,300	34,508	
1864-65...	8,416	42,083	50,500	

24. The clove crop has increased, but, as before observed, this culture is being gradually abandoned at present for that of the cocoa-palm, eventually it is to be hoped for that of the sugar-cane.

25. The collection of the clove crop is said to be difficult as compared with the garnering of the cocoanut, and the plenty of one year the forerunner of the next season's scarcity. To instance the uncertainty of the crop—

The yield of one estate fell from			1,200	frasilahs to	0·110.
A second	do.	do.	17,000	do.	„ 2·000.
A third	do.	do.	800	do.	„ 0.060.

26. The reasons assigned for this seeming exhaustion of the trees are not altogether fanciful. Amongst them is the destruction of clove foliage by the clove pickers.

27. A species of ant infests the tree, and constructs its nest from agglutinated leaves. These attack the gatherers, who recklessly tear off the branches which give an asylum to their assailants.

28. Clove stems have lately become an item of export, and the tree is thus further robbed of its sources of vigour.

29. On the season following an abundant crop the tree is said to appear in a leafage of light green, and to yield but little fruit. It is only when the foliage blooms with russet hue that the tree is known to be again robust.

30. The decrease in the cowrie trade, which originally was the foundation of the wealth of an eminent Hamburg firm, may be accepted as an index of the advanced political condition of the populations of the West African Litteral.

31. The direct trade with Britain has steadily advanced to £57,112 beyond the average trade total. From 1855 to 1859 the yearly average number of vessels trading with Zanzibar was 2, the tonnage 801. Since 1861-62 the number has risen from 8 to 19, and the tonnage from 3,500 to 6,598 the tonnage total of the year under review.

32. The indirect trade has been very considerable. Two-thirds of the Hamburg imports are said to issue from the marts of Great Britain. The whole of the cotton fabrics imported, save perhaps an unimportant contribution from Muscat, may be looked upon as of British manufacture, and the coal imports are wholly from Wales.

33. A small trade has sprung up with the Seychelles, which furnishes sugar bags of excellent quality, and a cotton staple scarcely to be surpassed.

34. The British Indian and Kutch trade is below the average, and considerably under the value of last year's commerce, but Britain has more than gained what India has lost. The London prices have indeed proved more attractive to exporters, than those of Western India, and a diversion to England of the outgoing supply has been the consequence.

35. The American trade, though far below the prosperous average of a period antecedent to the civil war, is now again reviving.

36. The Hamburg commerce for the year is above, the French below the average. The imports of the latter are mainly in silver five-franc pieces (local value two Rupees), which are eagerly bought up by the Banians for the Indian market. The import of French gold is considerable.

37. Before concluding this report, it may be useful to leave on record the tribute which has flowed respectively from the African interior Littoral and Islands of the Zanzibar dominions during the last five years to support the—

Home Trade Imports.

	1859-60.	1861-62.	1862-63.	1863-64.	1864-65
	£	£	£	£	£
Africa in the interior,—Slaves,* hides, ivory ..	271,111	34,681	81,381	174,953	150,953
Africa Littoral, Pemba, &c.—Oil seeds, cocoanut, cloves, jowaree.	103,075	89,603	134,121	142,359	117,253
Madagascar.—Rice, wax, ebony, tusks, coir, mats, &c.	19,777	3,146	3,462	11,131	13,172
Total, not including Zanzibar Island, produce.	393,963	127,430	218,964	328,443	281,378

* Seventy-two thousand, or an annual average of fourteen thousand four hundred slaves have passed through the Zanzibar custom house during the last five years as imports.

G. EDWIN EWARD,

Acting Political Agent.

List of Pamphlets and Papers received by the Chamber during the year 1866-67.

No.	Titles.	Received from.
1	Finance and Revenue Account of the Government of India for the year 1865-66.	Government of India.
2	Budget Estimate of Revenue Expenditure and Cash Balance of the Government of India for the year 1866-67.	Do.
3	Proceedings of the Council of the Governor of Bombay.	Bombay Government.
4	Bombay Customs, Annual Report of.	Commissioner of Customs.
5	Report on the result of the administration of the Salt Department during the year 1865-66.	Board of Revenue.
6	Telegraph Convention of Paris.	Director Mekran Const.
7	Administration of the Customs Revenue of the Bombay Presidency for the year 1865-66.	Commissioner of Customs.
8	Bombay Baroda and Central India Railway's Report on Kattiawar extension of the Railway.	B. B. & C. I. Railway.
9	Administration Report of the Bengal Presidency for the year 1865 66.	Bengal Government.
10	Administration Report of the Straits Settlement for the year 1865-66.	Singapore.
11	Administration Report of the North West Provinces for the year 1865-66.	N. W. P. Government.
12	Administration Report of the Punjaub Territories for the year 1865-66.	Punjaub Government.
13	British Indian Association, Annual Report of	British Indian Association.
14	Correspondence on the subject of Lighting up the entrance to the Harbour of Bombay.	Bombay Government
15	Papers relating to Pilotage system of Bombay.	Do.

List of Pamphlets—continued.

No.	Title.	Received from.
16	Minutes by the Hon'ble Mountstuart Elphinstone in the Revision of Military Salaries.	Bombay Government.
17	Papers relating to Maynee project in the Khuttow Talooka.	Do.
18	Irrigation projects for the Bombay Presidency Tank at Ekrookh near Sholapoor.	Do.
19	Project for the completion of an ancient unfinished work known as Bhatodee Tank in the Ahmednuggur Collectorate.	Do.
20	Papers relating to the Metrow Canal in the Eastern Narra districts, Sind.	Do.
21	Tariff Book Anglo-American Telegraph Co. Limited.	Anglo-American Telegraph Co., Limited.
22	Shanghai General Chamber of Commerce, Annual Report of.	Shanghai Chamber.
23	Bordeaux Chamber of Commerce, Annual Report of.	Bordeaux Chamber.
24	Cotton Supply Association Annual Report of.	Cotton Supply Association.
25	South Australian Chamber of Commerce, Annual Report of.	South Australian Chamber.
26	Natal Chamber of Commerce, Annual Report of.	Natal Chamber.
27	Bengal Chamber of Commerce, Annual Report of.	Calcutta.
28	Madras Chamber of Commerce, Annual Report of.	Madras.
29	Kurrachee Chamber of Commerce, Annual Report of	Kurrachee.
30	Tide Tables for the Ports of Bombay and Kurrachee.	Bombay Government.

FUNDS OF THE CHAMBER, 1866-67.

Disbursements.	Rs.	a.	p.	Receipts.	Rs.	a.	p.
Rent	2,875	0	0	Balance from last year	4,541	12	2
Printing	361	0	0	Since paid in	623	0	0
Advertisement	201	5	0	Amount received from Messrs. Smith, Fleming & Co., account of Mr. Reuter's Messages	263	11	9
Newspapers and Books	251	0	0	Subscriptions	14,950	0	0
Electric Telegraph Messages	22	8	0	Sales of Manifests and Trade Returns and Tonnage Scales	2,852	8	0
Postage Stamps	94	0	9	Interest allowed by Treasurers	270	0	8
Office Salaries and Petty charges	7,586	8	0				
Stationery	296	6	0				
Manifests and Trade Returns. Salaries.....Rs. 2,678 12 9 Printing ... „ 3,170 4 0	5,849	0	9				
Commission charged by Treasurers.	184	4	1				
Balance	5,780	0	0				
Total.....Rupees.	23,501	0	7	Total.....Rupees.	23,501	0	7

Balance in hands of Treasurers 30th September 1867.. Rs. 5,780 0 0

ADDENDA.

SHIP FREIGHT INWARDS.

In August 1858 a general agreement was come to by the merchants in Bombay to the effect that Inward Freight, when stated in sterling, or payable at the current rate of exchange, should, in the absence of special agreement, be paid and received at the rate of two shillings per rupee.

The manner in which the agreement was afterwards printed in the Annual Report of the Chamber led to differences of opinion regarding its proper interpretation, and also as to the original intention of the framers.

Reference was then made to the original draft, which, on being produced, was found to be in terms as above stated.

The subject was brought before a general meeting of the members of the Chamber held on 30th April 1868, when,—it having been considered desirable that on a matter of so much importance the agreement should be set forth in such a manner as would prevent all misunderstanding in future,—the following resolution, as a re-declaration of the original agreement, was unanimously agreed to, viz. :—

"With reference to the payment of Inward Freight at Bombay when stated in sterling, or when stated to be payable at the current rate of exchange, we the undersigned merchants do hereby agree that all such freight falling due after this date shall, in the absence of special agreement, be paid and recovered by us at the rate of two shillings per rupee."

JAMES TAYLOR,
Secretary.

Bombay Chamber of Commerce,
30th April 1868.

SHIPS' COMMISSIONS.

At a Special General Meeting of the members of the Chamber of Commerce held on 30th April 1868, it was unanimously resolved that the following rates for ships' commissions be added to the general list of commissions approved by the Chamber:—

For executing orders to Charter or engage Tonnage in Bombay or at outports .. .. 2½ per cent.

On realizing Bottomry Bonds or negotiating any loan on *respondentia* .. .. 2½ per cent.

On landing and re-shipping goods from any vessel in distress, stranded, or wrecked, or on landing or selling by auction damaged goods from any such vessel, and acting as agent for the master on behalf of all concerned, on the declared value of all such goods as may be re-shipped, and on net proceeds of all such goods as may be publicly sold .. .. 5 per cent.

If Opium, Indigo, Raw Silk, or Silk Goods.. .. 2½ per cent.

If Treasure, Precious Stones, or Jewellery .. .. 1 per cent.

On Moneys expended, *i. e.* on all disbursements made in efforts to save Ship or Cargo .. .. 5 per cent.

On Ships leaving the Port in ballast which have been consigned inward free of commissions, 6 annas per ton upon the English tonnage.

On Ships leaving the Port in ballast which have been consigned inwards and outwards, 12 annas per ton upon the English tonnage.

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